

Wan P, Tu J, Dehmer M, Zhang S, Emmert-Streib F. **Graph entropy based on the number of spanning forests of c-cyclic graphs**. Applied Mathematics and Computation. 2019 Dec 15;363. 124616. <https://doi.org/10.1016/j.amc.2019.124616>

Eriksson S-L, Orelma H. **Hyperbolic Function Theory in the Skew-Field of Quaternions**. Advances in Applied Clifford Algebras. 2019 Nov 1;29(5). 97. <https://doi.org/10.1007/s00006-019-1017-5>

Brede B, Calders K, Lau A, Raunonen P, Bartholomeus HM, Herold M et al. **Non-destructive tree volume estimation through quantitative structure modelling: Comparing UAV laser scanning with terrestrial LIDAR**. Remote Sensing of Environment. 2019 Nov 1;233. 111355. <https://doi.org/10.1016/j.rse.2019.111355>

Haukkanen P, Mattila M, Mäntysalo J. **Studying the inertias of LCM matrices and revisiting the Bourque-Ligh conjecture**. Journal of Combinatorial Theory. Series A. 2020 Apr 1;171. 105161. <https://doi.org/10.1016/j.jcta.2019.105161>

Raitoharju M, Piche R. **On Computational Complexity Reduction Methods for Kalman Filter Extensions**. IEEE Aerospace and Electronic Systems Magazine. 2019 Oct 7;34(10):2-19. <https://doi.org/10.1109/MAES.2019.2927898>

Loulou AE, Yli-Kaakinen J, Levanen T, Lehtinen V, Schaich F, Wild T et al. **Multiplierless filtered-OFDM transmitter for narrow-band IoT devices**. IEEE Internet of Things Journal. 2019 Oct 2. <https://doi.org/10.1109/JIOT.2019.2945186>

Cushing D, Kangaslampi R, Lipiäinen V, Liu S, Stagg GW. **The Graph Curvature Calculator and the curvatures of cubic graphs**. Experimental Mathematics. 2019 Sep 14. <https://doi.org/10.1080/10586458.2019.1660740>

Sorsa L-I, Takala M, Bambach P, Deller J, Vilenius E, Agarwal J et al. **Tomographic inversion of gravity gradient field for a synthetic Itokawa model**. Icarus. 2020 Jan 15;336. 113425. <https://doi.org/10.1016/j.icarus.2019.113425>

Adán AG, Orelma H, Sommen F. **Hypermonogenic Plane Wave Solutions of the Dirac Equation in Superspace**. Advances in Applied Clifford Algebras. 2019 Sep 1;29(4). 71. <https://doi.org/10.1007/s00006-019-0981-0>

Karhu K, Hilasvuori E, Järvenpää M, Arppe L, Christensen BT, Fritze H et al. **Similar temperature sensitivity of soil mineral-associated organic carbon regardless of age**. Soil Biology and Biochemistry. 2019 Sep 1;136. 107527. <https://doi.org/10.1016/j.soilbio.2019.107527>

Kauhanen J, Orelma H. **On the Structure of Octonion Regular Functions**. Advances in Applied Clifford Algebras. 2019 Sep;29(4). 77. <https://doi.org/10.1007/s00006-019-0983-y>

Vilander M, Lück M. **On the Succinctness of Atoms of Dependency**. Logical Methods in Computer Science. 2019 Aug 20;15(3):17:1-17:28.

Paunonen L, Phan D. **Reduced Order Controller Design for Robust Output Regulation**. IEEE Transactions on Automatic Control. 2019 Jul 22. <https://doi.org/10.1109/TAC.2019.2930185>

Phan D, Rodrigues SS. **Approximate Controllability for Navier–Stokes Equations in 3D Rectangles Under Lions Boundary Conditions**. Journal of Dynamical and Control Systems. 2019 Jul;25(3):351-376. <https://doi.org/10.1007/s10883-018-9412-0>

Jackson T, Shenkin A, Moore J, Bunce A, van Emmerik T, Kane B et al. **An architectural understanding of natural sway frequencies in trees**. Journal of the Royal Society. Interface. 2019 Jun 28;16(155). <https://doi.org/10.1098/rsif.2019.0116>

Huhtala K, Paunonen L. **Robust output regulation of counter-flow heat exchangers**. In 3rd IFAC Workshop on Control of Systems Governed by Partial Differential Equations, CPDE 2019. IFAC. 2019. p. 201-206. (IFAC-PapersOnLine). <https://doi.org/10.1016/j.ifacol.2019.08.036>

Humaloja J-P, Paunonen L. **The internal model principle for boundary control systems with polynomially bounded exogenous signals**. In 3rd IFAC Workshop on Control of Systems Governed by Partial Differential Equations, CPDE 2019. IFAC. 2019. p. 156-161. (IFAC-PapersOnLine). <https://doi.org/10.1016/j.ifacol.2019.08.028>

Lau A, Calders K, Bartholomeus H, Martius C, Raunonen P, Herold M et al. **Tree biomass equations from terrestrial LiDAR: A case study in Guyana**. Forests. 2019 Jun 1;10(6). 527. <https://doi.org/10.3390/f10060527>

Niemelä P, Valmari A, Ali-Löytty S. **Algorithms and Logic as Programming Primers**. In Computer Supported Education: 10th International Conference, CSEDU 2018, Revised Selected Papers. Springer Nature. 2019. p. 357-383. (Communications in Computer and Information Science). https://doi.org/10.1007/978-3-030-21151-6_18

Varvia P, Lähivaara T, Maltamo M, Packalen P, Seppänen A. **Gaussian Process Regression for Forest Attribute Estimation From Airborne Laser Scanning Data**. IEEE Transactions on Geoscience and Remote Sensing. 2019 Jun;57(6):3361-3369. <https://doi.org/10.1109/TGRS.2018.2883495>

Stankovic RS, Stankovic M, Astola JT, Moraga C. **Remarks on Similarities among Ternary Bent Functions**. In 2019 IEEE 49th International Symposium on Multiple-Valued Logic, ISMVL 2019. IEEE. 2019. p. 79-84. <https://doi.org/10.1109/ISMVL.2019.00022>

Paunonen L, Seifert D. **Asymptotics for periodic systems**. Journal of Differential Equations. 2019 May;266(11):7152-7172. <https://doi.org/10.1016/j.jde.2018.11.028>

De Biasi M, Lauri J. **On the complexity of restoring corrupted colorings**. Journal of Combinatorial Optimization. 2019 May;37(4):1150-1169. <https://doi.org/10.1007/s10878-018-0342-2>

Hanuš J, Marsset M, Vernazza P, Viikinkoski M, Drouard A, Broa M et al. **The shape of (7) Iris as evidence of an ancient large impact?** Astronomy and Astrophysics. 2019 Apr 1;624. A121. <https://doi.org/10.1051/0004-6361/201834541>

Humaloja J-P. **Robust and Model Predictive Control for Boundary Control Systems**. Tampere University, 2019. 26 p. (Tampere University Dissertations).

Fétick RJL, Jorda L, Vernazza P, Marsset M, Drouard A, Fusco T et al. **Closing the gap between Earth-based and interplanetary mission observations: Vesta seen by VLT/SPHERE**. Astronomy and Astrophysics. 2019 Mar 1;623. A6. <https://doi.org/10.1051/0004-6361/201834749>

Carry B, Vachier F, Berthier J, Marsset M, Vernazza P, Grice J et al. **Homogeneous internal structure of CM-like asteroid (41) Daphne**. Astronomy and Astrophysics. 2019 Mar 1;623. A132. <https://doi.org/10.1051/0004-6361/201833898>

Rimpiläinen V, Koulouri A, Lucka F, Kaipio JP, Wolters CH. **Improved EEG source localization with Bayesian uncertainty modelling of unknown skull conductivity**. NeuroImage. 2019 Mar 1;188:252-260. <https://doi.org/10.1016/j.neuroimage.2018.11.058>

Jackson T, Shenkin A, Wellpott A, Calders K, Origo N, Disney M et al. **Finite element analysis of trees in the wind based on terrestrial laser scanning data**. Agricultural and Forest Meteorology. 2019 Feb 15;265:137-144. <https://doi.org/10.1016/j.agrformet.2018.11.014>

Lehtimäki M, Paunonen L, Linne M-L. **Mathematical model order reduction in computational neuroscience**. 2019. Paper presented at 3rd HBP Student Conference on Interdisciplinary Brain Research, Ghent, Belgium.

Miinalainen T, Rezaei A, Us D, Nüßing A, Engwer C, Wolters CH et al. **A realistic, accurate and fast source modeling approach for the EEG forward problem**. NeuroImage. 2019;184(1):56-67. <https://doi.org/10.1016/j.neuroimage.2018.08.054>

Stockrahm A, Lahtinen V, Kangas JJJ, Kotiuga PR. **Cuts for 3-D magnetic scalar potentials: Visualizing unintuitive surfaces arising from trivial knots.** Computers and Mathematics with Applications. 2019. <https://doi.org/10.1016/j.camwa.2019.05.023>

Kunz M, Fichtner A, Härdtle W, Raunonen P, Bruelheide H, von Oheimb G. **Neighbour species richness and local structural variability modulate aboveground allocation patterns and crown morphology of individual trees.** ECOLOGY LETTERS. 2019;22(12):2130-2140. <https://doi.org/10.1111/ele.13400>

Batty C, Paunonen L, Seifert D. **Optimal energy decay for the wave-heat system on a rectangular domain.** SIAM JOURNAL ON MATHEMATICAL ANALYSIS. 2019;51(2):808-819. <https://doi.org/10.1137/18M1195796>

Eriksson S-L, Orelma H. **Quaternionic Hyperbolic Function Theory.** In Topics in Clifford Analysis. Springer. 2019. p. 25-52. (Trends in Mathematics). https://doi.org/10.1007/978-3-030-23854-4_2

Liu W, Atherton J, Möttus M, Gastellu-Etchegorry JP, Malenovský Z, Raunonen P et al. **Simulating solar-induced chlorophyll fluorescence in a boreal forest stand reconstructed from terrestrial laser scanning measurements.** Remote Sensing of Environment. 2019. 111274. <https://doi.org/10.1016/j.rse.2019.111274>

Gokceli S, Levanen T, Yli-Kaakinen J, Turunen M, Allen M, Riihonen T et al. **Software-defined radio prototype for fast-convolution-based filtered OFDM in 5G NR.** In 2019 European Conference on Networks and Communications, EuCNC 2019. IEEE. 2019. p. 235-240 <https://doi.org/10.1109/EuCNC.2019.8802008>

Bambach P, Deller J, Vilenius E, Pursiainen S, Takala M, Braun HM et al. **DISCUS – The Deep Interior Scanning CubeSat mission to a rubble pile near-Earth asteroid.** Advances in Space Research. 2018 Dec;62(12):3357-3368. <https://doi.org/10.1016/j.asr.2018.06.016>

Viikinkoski M, Vernazza P, Hanuš J, Le Coroller H, Tazhenova K, Carry B et al. **(16) Psyche: A mesosiderite-like asteroid?** Astronomy and Astrophysics. 2018 Nov 1;619. L3. <https://doi.org/10.1051/0004-6361/201834091>

Niemelä P, Mikkolainen V, Vuorinen J. **Compute mindlessly. Not! map consciously.** Universal Journal of Educational Research. 2018 Nov 1;6(11):2669-2678. <https://doi.org/10.13189/ujer.2018.061133>

Vernazza P, Broz M, Drouard A, Hanuš J, Viikinkoski M, Marsset M et al. **The impact crater at the origin of the Julia family detected with VLT/SPHERE?** Astronomy and Astrophysics. 2018 Oct 1;618. 33477. <https://doi.org/10.1051/0004-6361/201833477>

Lau A, Bentley LP, Martius C, Shenkin A, Bartholomeus H, Raunonen P et al. **Quantifying branch architecture of tropical trees using terrestrial LiDAR and 3D modelling.** Trees - Structure and Function. 2018 Oct;32(5):1219-1231. <https://doi.org/10.1007/s00468-018-1704-1>

Lehtimäki M, Paunonen L, Linne M-L. **Improvement of computational efficiency of a biochemical plasticity model.** 2018. Paper presented at Brain and Mind Symposium 2018, Helsinki, Finland.

Eiben E, Ganian R, Lauri J. **On the complexity of rainbow coloring problems.** Discrete Applied Mathematics. 2018 Sep;246:38-48. <https://doi.org/10.1016/j.dam.2016.10.021>

Sievänen R, Raunonen P, Perttunen J, Nikinmaa E, Kaitaniemi P. **A study of crown development mechanisms using a shoot-based tree model and segmented terrestrial laser scanning data.** Annals of Botany. 2018 Aug 27;122(3):423-434. <https://doi.org/10.1093/aob/mcy082>

Humaloja J-P, Dubljevic S. **Linear Model Predictive Control for Schrödinger Equation.** In 2018 Annual American Control Conference, ACC 2018. IEEE. 2018. p. 2569-2574 <https://doi.org/10.23919/ACC.2018.8431686>

Humaloja J-P, Paunonen L, Kurula M. **A Partial Internal Model for Approximate Robust Output Regulation of Boundary Control Systems**. In 23rd International Symposium on Mathematical Theory of Networks and Systems. 2018. p. 586-591

Phan-Duc D, Paunonen L. **Robust controllers for a heat equation using the Galerkin approximation**. In Proceedings of the 23rd International Symposium on Mathematical Theory of Networks and Systems. 2018. p. 856-863

Nortunen H. **Light, Shape and Space: Direct and Inverse Problems of Individual Objects and Populations**. Tampere University of Technology, 2018. 53 p. (Tampere University of Technology. Publication).

Takala M, Us D, Pursiainen S. **Multigrid-Based Inversion for Volumetric Radar Imaging With Asteroid Interior Reconstruction as a Potential Application**. IEEE Transactions on Computational Imaging. 2018 Jun 1;4(2):228-240. <https://doi.org/10.1109/TCI.2018.2811908>

Phan D, Rodrigues SS. **Stabilization to trajectories for parabolic equations**. Mathematics of Control, Signals, and Systems . 2018 Jun 1;30(2). 11. <https://doi.org/10.1007/s00498-018-0218-0>

Paunonen L, Seifert D. **Asymptotic Behaviour of Coupled Systems in Discrete and Continuous Time**. JOURNAL OF DYNAMICS AND DIFFERENTIAL EQUATIONS. 2018 Jun;30(2):433-445. <https://doi.org/10.1007/s10884-016-9547-1>

Åkerblom M. **Quantitative Tree Reconstruction from Terrestrial Laser Scanning Data and Applications**. Tampere University of Technology, 2018. 67 p. (Tampere University of Technology. Publication).

Viro E, Joutsenlahti J. **The StarT Project Competition from the Perspective of Mathematics and Academic Literacy**. EDUCATION SCIENCES. 2018 May 4;8(2). <https://doi.org/10.3390/educsci8020067>

Turunen E. **Paraconsistent Many-Valued Logic in GUHA Framework**. Acta Informatica Pragensia, University of Economics, Prague. 2018 May 3;7(1):104-111. <https://doi.org/10.18267/j.aip.116>

Kaasalainen S, Åkerblom M, Nevalainen O, Hakala T, Kaasalainen M. **Uncertainty in multispectral lidar signals caused by incidence angle effects**. Interface Focus. 2018 Apr 6;8(2). 20170033. <https://doi.org/10.1098/rsfs.2017.0033>

Cibulková H, Nortunen H, Ďurech J, Kaasalainen M, Vereš P, Jedicke R et al. **Distribution of shape elongations of main belt asteroids derived from Pan-STARRS1 photometry**. Astronomy and Astrophysics. 2018 Mar 1;611. A86. <https://doi.org/10.1051/0004-6361/201731554>

Krogerus T, Hyvönen M, Huhtala K. **Analysis of common rail pressure signal of dual-fuel large industrial engine for identification of injection duration of pilot diesel injectors**. Fuel. 2018 Mar;216:1-9. <https://doi.org/10.1016/j.fuel.2017.11.152>

Ala-Luhtala J. **Approximate Bayesian inference methods for stochastic state space models**. Tampere University of Technology, 2018. 56 p. (Tampere University of Technology. Publication).

Rutanen K. **Minimal Characterization of O-notation in Algorithm Analysis**. Theoretical Computer Science. 2018 Feb;713:31-41. <https://doi.org/10.1016/j.tcs.2017.12.026>

Paunonen L (Designer). **Robust output tracking and disturbance rejection for a 2D heat equation** Youtube: . 2018.

Pohjolainen S, Nykänen O, Venho J, Kangas J. **Analysing and Improving Student's Mathematics Skills using ICT-tools**. EURASIA JOURNAL OF MATHEMATICS, SCIENCE & TECHNOLOGY EDUCATION. 2018 Jan 8;14(4):1221-1227. 14(4). <https://doi.org/10.29333/ejmste/81869>

Koivisto M, Laakkonen P, Lauri J. **NP-completeness results for partitioning a graph into total dominating sets**. Theoretical Computer Science. 2018 Jan 1. <https://doi.org/10.1016/j.tcs.2018.04.006>

Merikoski JK, Haukkanen P, Mattila M, Tossavainen T. **On the spectral and Frobenius norm of a generalized Fibonacci r-circulant matrix**. Special Matrices. 2018 Jan 1;6(1):23-36. <https://doi.org/10.1515/spma-2018-0003>

Murtomaeki JS, Kirby G, van Nugteren J, Contat PA, Fleiter J, De Frutos OS et al. **10 kA Joints for HTS Roebel Cables**. IEEE Transactions on Applied Superconductivity. 2018;28(3). <https://doi.org/10.1109/TASC.2018.2804951>

Miinalainen T, Pursiainen S. **A case study of focal bayesian EEG inversion for whitney element source spaces: Mesh-based vs. cartesian orientations**. In EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017. Springer Verlag. 2018. p. 1065-1068. (IFMBE Proceedings). https://doi.org/10.1007/978-981-10-5122-7_266

Kauhanen J, Orelma H. **Cauchy–Riemann Operators in Octonionic Analysis**. Advances in Applied Clifford Algebras. 2018;28(1). 1. <https://doi.org/10.1007/s00006-018-0826-2>

Keranen M, Lauri J. **Computing minimum rainbow and strong rainbow colorings of block graphs**. Discrete Mathematics and Theoretical Computer Science. 2018;20(1). 22. <https://doi.org/10.23638/DMTCS-20-1-22>

Pohjolainen S, Myllykoski T. **Engineering Mathematics Education in Finland: A Comparative Analysis of EU, Russia, Georgia and Armenia**. In Pohjolainen S, Myllykoski T, Mercat C, Sosnovsky S, editors, Modern Mathematics Education for Engineering Curricula in Europe. Birkhäuser. 2018. p. 69-75

Valmari A, Vogler W. **Fair testing and stubborn sets**. International Journal on Software Tools for Technology Transfer. 2018;589-610. <https://doi.org/10.1007/s10009-017-0481-2>

Takala M, Bambach P, Deller J, Vilenius E, Wittig M, Lentz H et al. **Far-Field Inversion for the Deep Interior Scanning CubeSat**. IEEE Transactions on Aerospace and Electronic Systems. 2018. <https://doi.org/10.1109/TAES.2018.2874755>

Kaarakka TE, Ali-Löytty S, Huhtanen M. **Kehittämistutkimus: vuorovaikutteisten Matlab-opetusohjelmien vaikutus minäpystyvyyteen ja oppimistuloksiin yliopistomatematiikassa**. FMSEJA Journal . 2018;2(1):67-77.

Pohjolainen S, Rasila A, Kuosa K. **Matematiikan oppimisen tukeminen teknillisessä yliopistokoulutuksessa**. In Joutsenlahti J, Silfverberg H, Räsänen P, editors, Matematiikan opetus ja oppiminen. Porvoo: Niilo Mäki Instituutti. 2018. p. 450-474

Pohjolainen S. **Mathematics Education in EU for STEM Disciplines**. In Pohjolainen S, Myllykoski T, Mercat C, Sosnovsky S, editors, Modern Mathematics Education for Engineering Curricula in Europe: A Comparative Analysis of EU, Russia, Georgia and Armenia. Birkhäuser. 2018. p. 1-6 https://doi.org/10.1007/978-3-319-71416-5_1

Pohjolainen S, (ed.), Myllykoski T, (ed.), Mercat C, (ed.), Sosnovsky S, (ed.). **Modern Mathematics Education for Engineering Curricula in Europe: A Comparative Analysis of EU, Russia, Georgia and Armenia**. Birkhäuser, 2018. <https://doi.org/10.1007/978-3-319-71416-5>

Kowalik L, Lauri J, La AS. **On the fine-grained complexity of rainbow coloring**. SIAM Journal on Discrete Mathematics. 2018;32(3):1672-1705. <https://doi.org/10.1137/16M1102690>

Pohjolainen S, Sosnovsky S, Mercat C. **Overview of the Results and Recommendations**. In Pohjolainen S, Myllykoski T, Mercat C, Sosnovsky S, editors, Modern Mathematics Education for Engineering Curricula in Europe: A Comparative Analysis of EU, Russia, Georgia and Armenia. Switzerland: Birkhäuser. 2018. p. 185-196 https://doi.org/10.1007/978-3-319-71416-5_10

Viro IE, Joutsenlahti J. **Projektityöskentelyn kehittäminen yläkoulun matematiikan opetuksessa.** FMSERA Journal . 2018;2(1):90-99.

Humaloja J-P, Paunonen L. **Robust Regulation of Infinite-Dimensional Port-Hamiltonian Systems.** IEEE Transactions on Automatic Control. 2018;63(5). <https://doi.org/10.1109/TAC.2017.2748055>

Mulholland K, Virkki J, Raunonen P, Merilampi S. **Wearable RFID perspiration sensor tags for well-being applications – From laboratory to field use.** In EMBEC and NBC 2017 - Joint Conference of the European Medical and Biological Engineering Conference EMBEC 2017 and the Nordic-Baltic Conference on Biomedical Engineering and Medical Physics, NBC 2017. Springer Verlag. 2018. p. 1012-1015. (IFMBE Proceedings). https://doi.org/10.1007/978-981-10-5122-7_253

Bambach P, Deller J, Martel J, Vilenius E, Goldberg H, Sorsa L-I et al. **What's inside a rubble pile asteroid? DiSCUS - A tomographic twin radar Cubesat to find out.** In 69th International Astronautical Congress, IAC 2018. 2018. (Proceedings of the International Astronautical Congress, IAC).

Myllykoski TJ, Mattila P, Ali-Löytty S, Kaarakka T, Viro E. **Yliopistomatematiikan sähköisten tehtävien ja matemaattisen ajattelun kehittäminen.** FMSERA Journal . 2018;2(1):46-56.

Pyrhönen V-P, Koivisto H, Vilkkö M. **A Reduced-Order Two-Degree-of-Freedom Composite Nonlinear Feedback Control for a Rotary DC Servo Motor.** In Proceedings of the 56th IEEE Conference on Decision and Control. Melbourne, Australia. 2017. p. 2065-2071 <https://doi.org/10.1109/CDC.2017.8263951>

Turunen E. **Using GUHA Data Mining Method in Analyzing Road Traffic Accidents Occurred in the Years 2004–2008 in Finland.** Data Science and Engineering. 2017 Nov 27;2(3):224-231. <https://doi.org/10.1007/s41019-017-0044-2>

Gonzalez de Tanago J, Lau A, Bartholomeus H, Herold M, Avitabile V, Raunonen P et al. **Estimation of above-ground biomass of large tropical trees with terrestrial LiDAR.** Methods in Ecology and Evolution. 2017 Nov 13. <https://doi.org/10.1111/2041-210X.12904>

Viikinkoski M, Hanuš J, Kaasalainen M, Marchis F, Ďurech J. **Adaptive optics and lightcurve data of asteroids: Twenty shape models and information content analysis.** Astronomy and Astrophysics. 2017 Nov 1;607. A117. <https://doi.org/10.1051/0004-6361/201731456>

Myllykoski T, Ali-Löytty SS, Pohjolainen S. **Opiskelijoiden oppimistyökalujen käyttö tietokoneavusteisessa Matematiikkajumppa -tukiopetuksessa.** In 2017: Proceedings of the annual FMSERA symposium 2016 . 2017. p. 54-65. (Proceedings of the FMSERA annual symposium).

Viro E, Joutsenlahti J, Eriksson S-L. **Projektityöskentely matematiikan opiskelussa yläkoululaisten ja heidän opettajiensa kokemana.** In 2017: Proceedings of the annual FMSERA symposium 2016. 2017. (Proceedings of the FMSERA annual symposium).

Koskinen S, Kela J, Ali-Löytty SS, Joutsenlahti J. **Sähköisen matematiikan tentin toteuttaminen ja opiskelijoiden kokemukset sähköisestä tentistä.** In 2017: Proceedings of the annual FMSERA symposium 2016 . 2017. p. 110-120. (Proceedings of the FMSERA annual symposium).

Tengvall M, Kaarakka T, Ali-Löytty SS, Nokelainen P. **Substanssiosaamisen integroinnin vaikutus asenteisiin ja motivaatioon yliopistomatematiikassa.** In 2017: Proceedings of the annual FMSERA symposium 2016 . 2017. p. 76-87. (Proceedings of the FMSERA annual symposium).

Lin S-W, Sun J, Xiao H, Liu Y, Sanán D, Hansen H. **FiB: Squeezing loop invariants by interpolation between forward/backward predicate transformers.** In Rosu G, Di Penta M, Nguyen TN, editors, Proceedings of the 32nd IEEE/ACM International Conference on Automated Software Engineering: ASE 2017. IEEE Press. 2017. p. 793-803. (IEEE/ACM International Conference on Automated Software Engineering). <https://doi.org/10.1109/ASE.2017.8115690>

- Rautalin S, Ali-Löytty S, Piche R, Ala-Luhtala J, inventors. **Supporting an estimation of satellite locations**. G01S19/40. 2017 Sep 21.
- Xu X, Pohjolainen S, Dubljevic S. **Finite-dimensional regulators for a class of regular hyperbolic PDE systems**. International Journal of Control. 2017 Aug 30;1-18. <https://doi.org/10.1080/00207179.2017.1369575>
- Leppäkoski H, Rivero-Rodriguez A, Rautalin S, Muñoz Martínez D, Käppi J, Ali-Löytty S et al. **Semantic Labeling of User Location Context Based on Phone Usage Features**. Mobile Information Systems. 2017 Aug 24;2017:1-21. <https://doi.org/10.1155/2017/3876906>
- Marsset M, Carry B, Dumas C, Hanuš J, Viikinkoski M, Vernazza P et al. **3D shape of asteroid (6) Hebe from VLT/SPHERE imaging: Implications for the origin of ordinary H chondrites**. Astronomy and Astrophysics. 2017 Aug 1;604. A64. <https://doi.org/10.1051/0004-6361/201731021>
- Juchheim J, Annighöfer P, Ammer C, Calders K, Raunonen P, Seidel D. **How management intensity and neighborhood composition affect the structure of beech (*Fagus sylvatica* L.) trees**. TREES-STRUCTURE AND FUNCTION. 2017 Jul 14;31(5):1723–1735. <https://doi.org/10.1007/s00468-017-1581-z>
- Lehtimäki M, Paunonen L, Pohjolainen S, Linne M-L. **Order reduction for a signaling pathway model of neuronal synaptic plasticity**. In 20th IFAC World Congress. IFAC. 2017. p. 7687-7692. (IFAC-PapersOnLine). <https://doi.org/10.1016/j.ifacol.2017.08.1143>
- Laakkonen P. **Robust Regulation of MIMO systems: A Reformulation of the Internal Model Principle**. In 20th IFAC World Congress. IFAC. 2017. p. 693-697. (IFAC-PapersOnLine). <https://doi.org/10.1016/j.ifacol.2017.08.125>
- Ruuskanen J, Stenvall A, Lahtinen V. **Predicting Heat Propagation in Roebel-Cable Based Accelerator Magnet Prototype: One-Dimensional Approach with Coupled Turns**. IEEE Transactions on Applied Superconductivity. 2017 Jun;27(4). <https://doi.org/10.1109/TASC.2016.2630844>
- Takala M, Hämäläinen T, Pursiainen S. **The effect of hardware-computed travel time on localization accuracy in the inversion of experimental (acoustic) waveform data**. IEEE Transactions on Computational Imaging. 2017 Jun;3(2):344-354. <https://doi.org/10.1109/TCI.2017.2686698>
- Laakkonen P, Quadrat A. **A fractional representation approach to the robust regulation problem for SISO systems**. Systems and Control Letters. 2017 May 1;103:32-37. <https://doi.org/10.1016/j.sysconle.2017.02.006>
- Paunonen L, Seifert D. **Asymptotic behaviour in the robot rendezvous problem**. Automatica. 2017 May 1;79:127-130. <https://doi.org/10.1016/j.automatica.2017.02.015>
- Hanuš J, Viikinkoski M, Marchis F, Durech J, Kaasalainen M, Delbo M et al. **Volumes and bulk densities of forty asteroids from ADAM shape modeling**. Astronomy and Astrophysics. 2017 May 1;601. A114. <https://doi.org/10.1051/0004-6361/201629956>
- Paunonen L. **Output Regulation of Infinite-Dimensional Time-Delay Systems**. In American Control Conference (ACC), 2017. IEEE. 2017. p. 3189-3193. (Proceedings of the American Control Conference). <https://doi.org/10.23919/ACC.2017.7963438>
- Valmari A, Hella L. **The logics taught and used at high schools are not the same**. In Karhumäki J, Matiyasevich Y, Saarela A, editors, Proceedings of the Fourth Russian Finnish Symposium on Discrete Mathematics. Turku: TURKU CENTRE FOR COMPUTER SCIENCE. 2017. p. 172-186. (TUCS Lecture Notes; 26).

- Vorwerk J, Engwer C, Pursiainen S, Wolters CH. **A Mixed Finite Element Method to Solve the EEG Forward Problem.** IEEE Transactions on Medical Imaging. 2017 Apr 1;36(4):930-941. 7731161. <https://doi.org/10.1109/TMI.2016.2624634>
- Kunz M, Hess C, Raunonen P, Bienert A, Hackenberg J, Maas HG et al. **Comparison of wood volume estimates of young trees from terrestrial laser scan data.** iForest - Biogeosciences and Forestry. 2017 Apr 1;10(2):451-458. <https://doi.org/10.3832/ifor2151-010>
- Lauri M, Ropponen A, Ritala R. **Meeting a deadline: shortest paths on stochastic directed acyclic graphs with information gathering.** Annals of Mathematics and Artificial Intelligence. 2017 Apr;79(4):337-370. <https://doi.org/10.1007/s10472-016-9527-5>
- Åkerblom M, Raunonen P, Mäkipää R, Kaasalainen M. **Automatic tree species recognition with quantitative structure models.** Remote Sensing of Environment. 2017 Mar 15;191:1-12. <https://doi.org/10.1016/j.rse.2016.12.002>
- Lauri J. **Complexity of Rainbow Vertex Connectivity Problems for Restricted Graph Classes.** Discrete Applied Mathematics. 2017 Mar 11;219:132-146. <https://doi.org/10.1016/j.dam.2016.11.023>
- Hanuš J, Marchis F, Viikinkoski M, Yang B, Kaasalainen M. **Shape model of asteroid (130) Elektra from optical photometry and disk-resolved images from VLT/SPHERE and Nirc2/Keck.** Astronomy and Astrophysics. 2017 Mar 1;599. A36. <https://doi.org/10.1051/0004-6361/201629592>
- Pursiainen S, Lew S, Wolters CH. **Forward and Inverse Effects of the Complete Electrode Model in Neonatal EEG.** Journal of Neurophysiology. 2017 Mar;117(3):876-884. <https://doi.org/10.1152/jn.00427.2016>
- Valmari A. **The Congruences Below Fair Testing with Initial Stability.** In 2016 16th International Conference on Application of Concurrency to System Design. IEEE. 2017. p. 25-34 <https://doi.org/10.1109/ACSD.2016.15>
- Hansen H. **Abstractions for transition systems with applications to stubborn sets.** In Gibson-Robinson T, Hopcroft P, Lazić R, editors, Concurrency, Security, and Puzzles: Essays Dedicated to Andrew William Roscoe on the Occasion of His 60th Birthday. Springer International Publishing. 2017. p. 104-123. (Lecture Notes in Computer Science). https://doi.org/10.1007/978-3-319-51046-0_6
- Valmari A. **More stubborn set methods for process algebras.** In Gibson-Robinson T, Hopcroft P, Lazić R, editors, Concurrency, Security, and Puzzles: Essays Dedicated to Andrew William Roscoe on the Occasion of His 60th Birthday. Springer International Publishing. 2017. p. 246-271. (Lecture Notes in Computer Science). https://doi.org/10.1007/978-3-319-51046-0_13
- Valmari A. **Stop it, and be stubborn!** ACM Transactions on Embedded Computing Systems. 2017 Jan 1;16(2). 46. <https://doi.org/10.1145/3012279>
- Pursiainen S, Agsten B, Wagner S, Wolters CH. **Advanced boundary electrode modeling for tES and parallel tES/EEG.** IEEE Transactions on Neural Systems and Rehabilitation Engineering. 2017;26(1):37-44. <https://doi.org/10.1109/TNSRE.2017.2748930>
- Paunonen L, Seifert D. **Asymptotics for infinite systems of differential equations.** SIAM Journal on Control and Optimization. 2017;55(2):1153-1178. <https://doi.org/10.1137/15M1051993>
- Potapov I, Järvenpää M, Åkerblom M, Raunonen P, Kaasalainen M. **Bayes Forest: A data-intensive generator of morphological tree clones.** GigaScience. 2017;6(10). gix079. <https://doi.org/10.1093/gigascience/gix079>
- Koskela O, Belay B, Pursiainen S, Figueiras E, Hyttinen J. **Computational Model for Simulating Multifocal Imaging in Optical Projection Tomography.** In Mathematics in Imaging 2017. Optical Society of America. 2017. MTu1C.3 <https://doi.org/10.1364/MATH.2017.MTu1C.3>

Rivero-Rodriguez A, Nykänen O. **Context Awareness for Semantic Mobile Computing**. In Nurmi J, Lohan E-S, Wymeersch H, Seco-Granados G, Nykänen O, editors, Multi-Technology Positioning. Cham: Springer International Publishing. 2017. p. 251-267 https://doi.org/10.1007/978-3-319-50427-8_12

Eriksson S-L, Orelma H. **General Integral Formulas for k-hyper-mono-genic Functions**. Advances in Applied Clifford Algebras. 2017;27(1):99-110. <https://doi.org/10.1007/s00006-015-0629-7>

Humaloja J-P, Ali-Löytty S, Pohjolainen S, Hämäläinen T. **Independent Loops Search in Flow Networks Aiming for Well-Conditioned System of Equations**. In Quintela P, Barral P, Gómez D, Pena FJ, Rodríguez J, Salgado P, Vázquez-Mendéz ME, editors, Progress in Industrial Mathematics at ECMI 2016. Springer International Publishing. 2017. (Mathematics in industry). <https://doi.org/10.1007/978-3-319-63082-3>

Vuojamo V, Eriksson S-L. **Integral kernels for k-hypermonogenic functions**. Complex Variables and Elliptic Equations. 2017;62(9):1-12. <https://doi.org/10.1080/17476933.2016.1250402>

Saarela S, Breidenbach J, Raumonon P, Grafström A, Ståhl G, Ducey MJ et al. **Kriging prediction of stand-level forest information using mobile laser scanning data adjusted for nondetection**. CANADIAN JOURNAL OF FOREST RESEARCH-REVUE CANADIENNE DE RECHERCHE FORESTIERE. 2017;47(9):1257-1265. <https://doi.org/10.1139/cjfr-2017-0019>

Raitoharju M, García-Fernández Á, Piche R. **Kullback-Leibler Divergence Approach to Partitioned Update Kalman Filter**. Signal Processing. 2017;130. <https://doi.org/10.1016/j.sigpro.2016.07.007>

Nortunen H, Kaasalainen M. **LEADER: fast estimates of asteroid shape elongation and spin latitude distributions from scarce photometry**. Astronomy and Astrophysics. 2017;608. A91. <https://doi.org/10.1051/0004-6361/201731360>

Myllykoski T, Ali-Löytty SS. **Matematiikan Perustaitojen Testi: Testin tehtävien ja vuosien 2010-2016 tulosten analyysi**. 2017.

Mattila M, Merikoski JK, Haukkanen P, Tossavainen T. **Maximal perpendicularity in certain Abelian groups**. ACTA UNIVERSITATIS SAPIENTIAE: MATHEMATICA. 2017;9(1):235-247. <https://doi.org/10.1515/ausm-2017-0016>

Diaz-Moreno JC, Medina J, Turunen E. **Minimal solutions of general fuzzy relation equations on linear carriers. An algebraic characterization**. Fuzzy Sets and Systems. 2017;311:112-123. <https://doi.org/10.1016/j.fss.2016.02.004>

Upadhaya B, Martin F, Rasilo P, Handgruber P, Belahcen A, Arkkio A. **Modelling anisotropy in non-oriented electrical steel sheet using vector Jiles-Atherton model**. COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering. 2017;36(3):764-773. <https://doi.org/10.1108/COMPEL-09-2016-0399>

Koivisto M, Laakkonen P, Lauri J. **NP-completeness results for partitioning a graph into total dominating sets**. In Computing and Combinatorics - 23rd International Conference, COCOON 2017, Proceedings. Springer Verlag. 2017. p. 333-345. (Lecture Notes in Computer Science). https://doi.org/10.1007/978-3-319-62389-4_28

Couceiro M, Foldes S, Meletiou GC. **On homomorphisms between products of median algebras**. Algebra Universalis. 2017;78(4):545-553. <https://doi.org/10.1007/s00012-017-0468-6>

Mattila M. **Positive definite arithmetical functions**. 2017. Paper presented at Finnish Number Theory Days 2017, Tampere, Finland.

Paunonen L. **Robust controllers for regular linear systems with infinite-dimensional exosystems**. SIAM Journal on Control and Optimization. 2017;55(3):1567-1597. <https://doi.org/10.1137/16M107181X>

Kauhanen J, Orelma H. **Some Theoretical Remarks of Octonionic Analysis**. In Egorov IE, Popov SV, Vabishchevich PN, Antonov MY, Lazarev NP, Troeva MS, Ivanova AO, Grigor'ev YM, editors, Proceedings of the 8th International Conference On Mathematical Modeling (ICMM-2017). Vol. 1907. American Institute of Physics AIP. 2017. 030056. (AIP Conference Proceedings). <https://doi.org/10.1063/1.5012678>

Niemimäki O, Kurz S, Kettunen L. **Structure-preserving mesh coupling based on the Buffa-Christiansen complex**. Mathematics of Computation. 2017;86:507-524. <https://doi.org/10.1090/mcom/3121>

Valmari A, Hansen H. **Stubborn set intuition explained**. In Transactions on Petri Nets and Other Models of Concurrency XII. Springer Verlag. 2017. p. 140-165. (Lecture Notes in Computer Science). https://doi.org/10.1007/978-3-662-55862-1_7

Nykänen O. **Teollinen internet ja semanttinen mallinnus**. In Martinsuo M, Kärri T, editors, Teollinen internet uudistaa palveluliiketoimintaa ja kunnossapitoa. Kerava: Kunnossapitoyhdistys ProMaint. 2017. p. 102-123

Haukkanen P, Merikoski JK, Mattila M, Tossavainen T. **The arithmetic Jacobian matrix and determinant**. Journal of Integer Sequences. 2017;20(9). 17.9.2.

Eriksson S-L, Orelma H, Vieira N. **Two-Sided Hypergenic Functions**. Advances in Applied Clifford Algebras. 2017;27(1):111–123. <https://doi.org/10.1007/s00006-015-0605-2>

Turunen E. **RS-BL-algebras are MV-algebras**. Iranian Journal of Fuzzy Systems. 2016 Dec 1;13(6):153-154.

Cibulkova H, Durech J, Vokrouhlicky D, Kaasalainen M, Oszkiewicz DA. **Distribution of spin-axes longitudes and shape elongations of main-belt asteroids**. Astronomy and Astrophysics. 2016 Dec;596. A57. <https://doi.org/10.1051/0004-6361/201629192>

Eriksson S-L, Orelma H. **A New Cauchy Type Integral Formula for Quaternionic k-hypermonogenic Functions**. In Bernstein S, Kähler U, Sabadini I, Sommen F, editors, Modern Trends in Hypercomplex Analysis. Springer International Publishing. 2016. p. 175-189. (Trends in Mathematics). https://doi.org/10.1007/978-3-319-42529-0_9

Pursiainen S, Vorwerk J, Wolters CH. **Electroencephalography (EEG) forward modeling via H(div) finite element sources with focal interpolation**. Physics in Medicine and Biology. 2016 Nov 15;61(24):8502-8520. <https://doi.org/10.1088/0031-9155/61/24/8502>

Lauri J. **Chasing the Rainbow Connection: Hardness, Algorithms, and Bounds**. Tampere University of Technology, 2016. 67 p. (Tampere University of Technology. Publication).

Viro E. **Projektipankki yläkoulun matematiikkaan**. Dimensio. 2016 Oct 26;2016(5):29-30.

Gupta JP, Menon K, Kärkkäinen H, Huhtamäki J, Mukkamala RR, Hussain A et al. **Identifying weak ties from publicly available social media data in an event**. In AcademicMindtrek '16 Proceedings of the 20th International Academic Mindtrek Conference. ACM. 2016. p. 11-19 <https://doi.org/10.1145/2994310.2994354>

Lehtonen P, Toivanen P, Aalto P, Björkqvist T, Hakkarainen M, Harsia P et al. **Resurssitehokkaampi ja ilmastonutraalimpi energijärjestelmä, mutta miten? Suomalaiset avaintoimijat vastaavat**. EL-TRAN Analyysi, 2016. 11 p.

Myllykoski T, Pohjolainen S, Ali-Löytty S. **Students' Use of Learning Tools and Tool Types: Solving Self-Study Assignments on an Online Platform**. In SEFI 2016 Annual Conference Proceedings: Engineering Education on Top of the World: Industry University Cooperation. European Society for Engineering Education SEFI. 2016

Joutsenlahti J, Ali-Löytty S, Pohjolainen S. **Developing Learning and Teaching in Engineering Mathematics with and without Technology**. In SEFI 2016 Annual Conference Proceedings: Engineering Education on Top of the World: Industry University Cooperation. European Society for Engineering Education SEFI. 2016

Devillers R, Valmari A, Penczek W. **Application and theory of Petri nets and other models of concurrency: Special issue of selected papers from Petri Nets 2015**. *Fundamenta Informaticae*. 2016 Sep 13;146(1):v-vi. <https://doi.org/10.3233/FI-2016-1373>

Foldes S, Radeleczki S. **Interval decomposition lattices are balanced**. *DEMONSTRATIO MATHEMATICA*. 2016 Sep 1;49(3):271-281. <https://doi.org/10.1515/dema-2016-0023>

Valmari A, Kaarakka T. **MathCheck: a tool for checking math solutions in detail**. In SEFI 2016 Annual Conference Proceedings: Engineering Education on Top of the World: Industry University Cooperation. European Society for Engineering Education SEFI. 2016

Batty C, Paunonen L, Seifert D. **Optimal energy decay in a one-dimensional coupled wave–heat system**. *Journal of Evolution Equations*. 2016 Sep;16(3):649–664. <https://doi.org/10.1007/s00028-015-0316-0>

Hansen H, Valmari A. **Safety Property-Driven Stubborn Sets**. In Larsen K, Potapov I, Srba J, editors, *Reachability Problems: 10th International Workshop, RP 2016, Aalborg, Denmark, September 19-21, 2016, Proceedings*. Springer International Publishing. 2016. p. 90-103. (Lecture notes in computer science). https://doi.org/10.1007/978-3-319-45994-3_7

Heiliö M, Lähivaara T, Laitinen E, Mantere T, Merikoski J, Pohjolainen S et al. **Mathematical Modelling**. Switzerland: Springer International Publishing, 2016. 242 p. <https://doi.org/10.1007/978-3-319-27836-0>

Jussila J, Aramo-Immonen H. **Experienced risks in social media use – longitudinal study among university students**. In Gómez Chova L, López Martínez A, Candel Torres I, editors, *EDULEARN16 Proceedings: 8th annual International Conference on Education and New Learning Technologies, Barcelona (Spain). 4th - 6th of July, 2016*. . Vol. 8. IATED Academy. 2016. p. 1255-1260. (EDULEARN Proceedings). <https://doi.org/10.21125/edulearn.2016.1257>

Paunonen L, Seifert D. **Asymptotic Behaviour of Platoon Systems**. In *Proceedings of the 22nd International Symposium on Mathematical Theory of Networks and Systems*. University of Minnesota. 2016. p. 830-836

Pohjolainen S, Suutala A. **Acoustic Modelling**. In Pohjolainen S, editor, *Mathematical Modelling*. Switzerland: Springer. 2016. p. 185-205 https://doi.org/10.1007/978-3-319-27836-0_11

Hämäläinen T, Pohjolainen S. **The Structure of Robust Controllers for Distributed Parameter Systems**. In *Proceedings of the European Control Conference, June 29 - July 1, 2016, Aalborg Denmark*. Aalborg, Denmark: IEEE. 2016 <https://doi.org/10.1109/ECC.2016.7810619>

Raitoharju M, Piché R, Ala-Luhtala J, Ali-Löytty S. **Partitioned Update Kalman Filter**. *Journal of Advances in Information Fusion*. 2016 Jun;11(1):3-14.

Turunen E, Rodrigues JT. **Two Consistent Many-Valued Logics for Paraconsistent Phenomena**. In Beziau J-Y, Chakraborty M, Dutta S, editors, *New Directions in Paraconsistent Logic : 5th WCP, Kolkata, India, February 2014*. New Delhi Heidelberg New York Dordrecht London: Springer Verlag. 2016. p. 185-210. (Springer Proceedings in Mathematics & Statistics). <https://doi.org/10.1007/978-81-322-2719-9>

Piipponen A, Valmari A. **Constructing Minimal Coverability Sets**. *Fundamenta Informaticae*. 2016 Mar 4;143(3-4):393-414. <https://doi.org/10.3233/FI-2016-1319>

Eiben E, Ganian R, Lauri J. **On the Complexity of Rainbow Coloring Problems**. In Lipták Z, Smyth WF, editors, *Combinatorial Algorithms: 26th International Workshop, IWCA 2015, Verona, Italy, October 5-7, 2015, Revised Selected Papers*. Springer International Publishing. 2016. p. 209-220. (Lecture Notes in Computer Science). https://doi.org/10.1007/978-3-319-29516-9_18

Eriksson S-L, Salminen J, Viro E. **Projekteja yläkoulun matematiikkaan**. LUMA-sanomat. 2016 Feb 15.

Gotkhindikar AD. **On the Underlying Mathematical and Quantum Structure of Quantum Cryptography**. International Journal of Engineering and Computer Science. 2016 Feb;5(2):15685-15699. <https://doi.org/10.18535/ijecs/v5i2.7>

Ali-Löytty S, Parviainen P, Pohjolainen S. **Opetusteknologiaa hyödyntävä oppimisympäristö MATLABin alkeiden opiskeluun**. 2016.

Viikinkoski M. **Shape reconstruction from generalized projections**. Tampere University of Technology, 2016. 53 p. (Tampere University of Technology. Publication).

Mattila M, Haukkanen P. **Studying the various properties of MIN and MAX matrices - elementary vs. more advanced methods**. Special Matrices. 2016 Jan;4(1):101-109. <https://doi.org/10.1515/spma-2016-0010>

Laakkonen A, Paunonen L. **A Simple Controller with a Reduced Order Internal Model in the Frequency Domain**. In Proceedings of European Control Conference 2016. IEEE. 2016. p. 1988-1992 <https://doi.org/10.1109/ECC.2016.7810583>

Kaasalainen M. **Asteroid models from photometry and complementary data sources**. In Chavero C, Cunha K, Carvano J, Fernandes MB, Dupke R, editors, Graduate School In Astronomy: Xvi Special Courses At The National Observatory Of Rio De Janeiro: Xvi Cce. AMER INST PHYSICS. 2016. (AIP Conference Proceedings). <https://doi.org/10.1063/1.4948806>

Paunonen L. **Controller Design for Robust Output Regulation of Regular Linear Systems**. IEEE Transactions on Automatic Control. 2016;61(10):2974-2986. <https://doi.org/10.1109/TAC.2015.2509439>

Potapov I, Järvenpää M, Åkerblom M, Raunonen P, Kaasalainen M. **Data-based stochastic modeling of tree growth and structure formation**. Silva Fennica. 2016;50(1). 1413. <https://doi.org/10.14214/sf.1413>

Lauri J. **Further hardness results on rainbow and strong rainbow connectivity**. Discrete Applied Mathematics. 2016;201:191-200. <https://doi.org/10.1016/j.dam.2015.07.041>

Di Nola A, Grigolia R, Turunen E. **Fuzzy Logic of Quasi-Truth: An Algebraic Treatment**. Switzerland: Springer, 2016. 116 p. (Studies in Fuzziness and Soft Computing). <https://doi.org/10.1007/978-3-319-30406-9>

Silvennoinen R, Merikoski J. **Integer Models**. In Pohjolainen S, editor, Mathematical Modelling. Springer International Publishing. 2016. p. 35-54 https://doi.org/10.1007/978-3-319-27836-0_4

Rivero-Rodriguez A, Pileggi P, Nykänen OA. **Mobile Context-Aware Systems: Technologies, Resources and Applications**. International Journal of Interactive Mobile Technologies. 2016;10(2):25-32. <https://doi.org/10.3991/ijim.v10i2.5367>

Mäkelä A-M, Ali-Löytty S, Joutsenlahti J, Kauhanen J. **Moodlen työpaja: Vertaisarviointi osana opetusta yliopistomatematiikan ensimmäisellä peruskurssilla**. In Silfvenberg H, Hästö P, editors, Matematiikan ja luonnontieteiden opetuksen tutkimusseuran tutkimuspäivät 2015. Matematiikan ja luonnontieteiden opetuksen tutkimusseura r.y. 2016. p. 90-99

Humaloja J-P, Hämäläinen T, Pohjolainen S. **On Detecting the Shape of an Unknown Object in an Electric Field**. In Russo G, Capasso V, Nicosia G, Romano V, editors, Progress in Industrial Mathematics at ECMI 2014. Springer International Publishing. 2016. (Mathematics in Industry). <https://doi.org/10.1007/978-3-319-23413-7>

Kowalik Ł, Lauri J. **On finding rainbow and colorful paths**. Theoretical Computer Science. 2016;628:110-114. <https://doi.org/10.1016/j.tcs.2016.03.017>

Eriksson S-L, Orelma H. **On k-Hypermonogenic Functions and Their Mean Value Properties**. Complex Analysis and Operator Theory. 2016;10(2):311-325. <https://doi.org/10.1007/s11785-015-0445-z>

Piché R. **Online tests of Kalman filter consistency**. International Journal of Adaptive Control and Signal Processing. 2016;30(1):115–124. <https://doi.org/10.1002/acs.2571>

Couceiro M, Lehtonen E. **On the arity gap of finite functions: Results and applications**. Journal of Multiple-Valued Logic and Soft Computing. 2016;27(2-3):193-207.

Kowalik L, Lauri J, Socala A. **On the Fine-Grained Complexity of Rainbow Coloring**. In Sankowski P, Zaroliagis C, editors, 24th Annual European Symposium on Algorithms (ESA 2016). Vol. 57. 2016. (Leibniz International Proceedings in Informatics (LIPIcs)). <https://doi.org/10.4230/LIPIcs.ESA.2016.58>

Pursiainen S, Kaasalainen M. **Orbiter-to-orbiter tomography: a potential approach for small solar system bodies**. IEEE Transactions on Aerospace and Electronic Systems. 2016;52(6):2747-2759. <https://doi.org/10.1109/TAES.2016.150638>

Laakso T, Kaasalainen M. **Poincaré inverse problem and torus construction in phase space**. Physica D: Nonlinear Phenomena. 2016;315:72-82. <https://doi.org/10.1016/j.physd.2015.10.011>

Pohjola J, Turunen J, Lipping T, Ikonen ATK. **Probabilistic assessment of the influence of lake properties in long-term radiation doses to humans**. JOURNAL OF ENVIRONMENTAL RADIOACTIVITY. 2016;164:258–267. <https://doi.org/10.1016/j.jenvrad.2016.08.001>

Shepard MK, Richardson J, Taylor PA, Rodriguez-Ford LA, Conrad A, de Pater I et al. **Radar observations and shape model of asteroid 16 Psyche**. Icarus. 2016;281:388-403. <https://doi.org/10.1016/j.icarus.2016.08.011>

Ropponen A, Lauri M, Ritala R. **Risk-averse path planning with observation options**. In Finzi A, Karpas E, editors, Proceedings of the 4th ICAPS Workshop on Planning and Robotics. 2016. p. 25-36. (Workshop on Planning and Robotics).

Humaloja J-P, Paunonen L, Pohjolainen S. **Robust Regulation for First-Order Port-Hamiltonian Systems**. In Proceedings of the 15th European Control Conference, Aalborg, Denmark, June 29th - July 1st, 2016. IEEE. 2016 <https://doi.org/10.1109/ECC.2016.7810618>

Humaloja J-P, Paunonen L, Pohjolainen S. **Robust Regulation for Port-Hamiltonian Systems of Even Order**. In Proceedings of the 22nd International Symposium on Mathematical Theory of Networks and Systems, Minneapolis, MN, USA, July 12-15, 2016. University of Minnesota. 2016. p. 152-156

Kovanen T, Tarhasaari T, Kettunen L. **Sähkömagneettinen malli funktoreina ja luonnollisina muunnoksina**. Arkhimedes. 2016;21-30.

Turunen E, Raivio K, Mantere T. **Soft Computing Methods**. In Pohjolainen S, editor, Mathematical Modelling. Springer International Publishing. 2016. p. 79-112 https://doi.org/10.1007/978-3-319-27836-0_6

Kaarakka T. **Spectral density function of the Doob transformation of fractional Brownian motion (i.e. the fractional Ornstein-Uhlenbeck process)**. 2016. Paper presented at Finnish Mathematical Days 2016, Turku, Finland.

Valmari A, Hansen H. **Stubborn Set Intuition Explained**. In Cabac L, Kristensen LM, Rölke H, editors, Petri Nets and Software Engineering 2016: Proceedings of the International Workshop on Petri Nets and Software Engineering 2016, including the International Workshop on Biological Processes & Petri Nets 2016. CEUR-WS. 2016. p. 213-232. (CEUR Workshop Proceedings).

Lahtinen V, Stenvall A. **Towards a unified framework for decomposability of processes**. SYNTHESIS. 2016;194(11):4411-4427. <https://doi.org/10.1007/s11229-016-1139-4>

Kiili K, Devlin K, Multisilta J. **Editorial: is Game-Based Math Learning Finally Coming of Age?** International Journal of Serious Games. 2015 Dec 8;2(4). 1.

Raitoharju M, Ali-Löytty S, Piché R. **Binomial Gaussian mixture filter**. Eurasip Journal on Advances in Signal Processing. 2015 Dec 2;2015(1). 36. <https://doi.org/10.1186/s13634-015-0221-2>

Koivisto M, Nurminen H, Ali-Löytty S, Piche R. **Graph-Based Map Matching for Indoor Positioning**. In 10th International Conference on Information, Communications and Signal Processing (ICICS). IEEE. 2015
<https://doi.org/10.1109/ICICS.2015.7459983>

Raitoharju M, Nurminen H, Piché R. **Kalman filter with a linear state model for PDR+WLAN positioning and its application to assisting a particle filter**. Eurasip Journal on Advances in Signal Processing. 2015 Dec 1;2015(1). 33.
<https://doi.org/10.1186/s13634-015-0216-z>

Hackenberg J, Spiecker H, Calders K, Disney M, Raunonen P. **SimpleTree: An Efficient Open Source Tool to Build Tree Models from TLS Clouds**. Forests: Open Access Journal. 2015 Nov 23;6(11):4245-4294. <https://doi.org/10.3390/f6114245>

Kaarakka T. **Fractional Ornstein-Uhlenbeck Processes**. Tampere University of Technology, 2015. 102 p. (Tampere University of Technology. Publication).

Pursiainen S, Bauer M, Vorwerk J, Köstler H, Wolters CH. **Comparison Study for Whitney (Raviart-Thomas) Type Source Models in Finite Element Method Based EEG Forward Modeling**. IEEE Transactions on Biomedical Engineering. 2015 Nov;62(11):2648-2656. <https://doi.org/10.1109/TBME.2015.2439282>

Mäkelä A-M, Ali-Löytty SS, Kauhanen JP, Joutsenlahti J. **Moodlen työpaja: Vertaisarviointi osana opetusta matematiikan ensimmäisellä peruskurssilla**. 2015. Paper presented at MATEMATIIKAN, LUONNONTIETEEN JA TEKNOLOGIAN OPETUKSEN TUTKIMUKSEN PÄIVÄT, .

Kartasalo K, Polonen R-P, Ojala M, Rasku J, Lehtala J, Aalto-Setälä K et al. **CytoSpectre: A tool for spectral analysis of oriented structures on cellular and subcellular levels**. BMC Bioinformatics. 2015 Oct 26;16(1). 344.
<https://doi.org/10.1186/s12859-015-0782-y>

Nurminen H, Ardeshiri T, Piche R, Gustafsson F. **A NLOS-robust TOA positioning filter based on a skew-t measurement noise model**. In 2015 International Conference on Indoor Positioning and Indoor Navigation (IPIN). IEEE. 2015. p. 1-7
<https://doi.org/10.1109/IPIN.2015.7346786>

Paunonen L, Laakkonen P. **Polynomial Input-Output Stability for Linear Systems**. IEEE Transactions on Automatic Control . 2015 Oct 1;60(10):2797-2802. <https://doi.org/10.1109/TAC.2015.2398890>

Viikinkoski M, Kaasalainen M, Durech J, Carry B, Marsset M, Fusco T et al. **VLT/SPHERE- and ALMA-based shape reconstruction of asteroid (3) Juno**. Astronomy and Astrophysics. 2015 Sep 1;581. L3. <https://doi.org/10.1051/0004-6361/201526626>

Valmari A. **Stop It, and Be Stubborn!** In Haar S, Meyer R, editors, Application of Concurrency to System Design (ACSD): 2015 15th International Conference on . IEEE Computer Society. 2015. p. 10-19. 2 <https://doi.org/10.1109/ACSD.2015.14>

Ala-Luhtala J, Särkkä S, Piche R. **Gaussian filtering and variational approximations for Bayesian smoothing in continuous-discrete stochastic dynamic systems**. Signal Processing. 2015 Jun;111:124-136.
<https://doi.org/10.1016/j.sigpro.2014.12.013>

Eriksson S-L, Orelma H. **Fundamental solution of k-hyperbolic harmonic functions in odd spaces**. Journal of Physics: Conference Series. 2015 Apr 13;597(1). 012034. <https://doi.org/10.1088/1742-6596/597/1/012034>

Viikinkoski M, Kaasalainen M, Durech J. **ADAM: A general method for using various data types in asteroid reconstruction**. Astronomy and Astrophysics. 2015 Apr 1;576. A8. <https://doi.org/10.1051/0004-6361/201425259>

Pyrhönen V-P, Koivisto H. **On improvement of transient stage of composite nonlinear feedback control using arbitrary order set point filters**. In 2014 IEEE International Conference on Control System, Computing and Engineering (ICCSCE). Institute of Electrical and Electronics Engineers IEEE. 2015. p. 147 - 152 <https://doi.org/10.1109/ICCSCE.2014.7072705>

Pyrhönen V-P, Koivisto H. **Composite Nonlinear Feedback Control of a Chemical Reactor**. In Proceedings of AutomaatioXXI, The Industrial Revolution of Internet – From Intelligent Devices to Networked Intelligence. Helsinki, Finland: Suomen Automaatioseura ry. 2015. (SAS julkaisusarja).

Eriksson S-L, Viro E. **Projektioppiminen: lähtökohtana ympäröivä maailma**. LUMA-sanomat. 2015 Mar 11.

Eriksson S-L, Haukkanen P, Hukka TI, Lemmetyinen H. **Tampereen matemaattisten aineiden aineenopettajakoulutus**. Lumat. 2015 Mar 11;3(6):800-807.

Eriksson S-L, Orelma H, Vuojamo V. **Generalized hyperbolic harmonic functions in the plane**. In Proceedings of the International Conference on Numerical Analysis and Applied Mathematics 2014 (ICNAAM-2014). Vol. 1648. American Institute of Physics Inc. 2015. 440007 <https://doi.org/10.1063/1.4912658>

Potapov I, Zhurov B, Volkov E. **Multi-stable dynamics of the non-adiabatic repressilator**. Journal of the Royal Society. Interface. 2015 Mar 6;12(104). 20141315. <https://doi.org/10.1098/rsif.2014.1315>

Paunonen L. **Designing controllers with reduced order internal models**. IEEE Transactions on Automatic Control. 2015 Mar 1;60(3):775-780. 6826480. <https://doi.org/10.1109/TAC.2014.2329212>

Rivero Rodriguez A, Leppäkoski H, Piché R. **Semantic Labeling of Places based on Phone Usage Features using Supervised Learning**. In 2014 Ubiquitous Positioning Indoor Navigation and Location Based Service, UPINLBS 2014 - Conference Proceedings. Piscataway, NJ, USA: IEEE. 2015. p. 97-102. 7033715 <https://doi.org/10.1109/UPINLBS.2014.7033715>

Foldes S, Horváth EK, Radeleczki S, Waldhauser T. **A general framework for island systems**. Acta Universitatis Szegediensis: Acta Scientiarum Mathematicarum. 2015;81(1-2):3-24. <https://doi.org/10.14232/actasm-013-279-7>

Åkerblom M, Raunonen P, Kaasalainen M, Casella E. **Analysis of geometric primitives in quantitative structure models of tree stems**. Remote Sensing. 2015;7(4):4581-4603. <https://doi.org/10.3390/rs70404581>

Devillers R, (ed.), Valmari A, (ed.). **Application and Theory of Petri Nets and Concurrency: 36th International Conference, PETRI NETS 2015 Brussels, Belgium, June 21-26, 2015 Proceedings**. Springer Verlag, 2015. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)). <https://doi.org/10.1007/978-3-319-19488-2>

Lau Sarmiento A, Bartholomeus H, Herold M, Martius C, Malhi Y, Patrick Bentley L et al. **Application of terrestrial LiDAR and modelling of tree branching structure for plant- scaling models in tropical forest trees**. In Proceedings of SilviLaser 2015: 14th conference on Lidar Applications for Assessing and Managing Forest Ecosystems. 2015. p. 96-98

Huhtamäki J, Lasrado L, Menon K, Kärkkäinen H, Jussila J. **Approach for Investigating Crowdfunding Campaigns with Platform Data: Case Indiegogo**. In Academic MindTrek'15: September 22-24, 2015, Tampere, Finland. ACM. 2015 <https://doi.org/10.1145/2818187.2818289>

Gómez-Herrero G, Wu W, Rutanen K, Soriano MC, Pipa G, Vicente R. **Assessing coupling dynamics from an ensemble of time series**. *Entropy*. 2015;17(4):1958-1970. <https://doi.org/10.3390/e17041958>

Ďurech J, Carry B, Delbo M, Kaasalainen M, Viikinkoski M. **Asteroid Models from Multiple Data Sources**. In Michel P, DeMeo FE, Bottke Jr. WF, editors, *Asteroids IV*. Tucson: UNIVERSITY OF ARIZONA PRESS. 2015. p. 183-202 https://doi.org/10.2458/azu_uapress_9780816532131-ch010

Björklund A, Kaski P, Kowalik Ł, Lauri J. **Engineering motif search for large graphs**. In 2015 Proceedings of the Seventeenth Workshop on Algorithm Engineering and Experiments (ALENEX). 2015. p. 104-118. (Workshop on Algorithm Engineering and Experiments). <https://doi.org/10.1137/1.9781611973754.10>

Eriksson S-LA. **Equal Opportunities in Education of Science, Mathematics and Technology**. In Laurinkari J, Tarvanen M, editors, *The Proceedings of International Symposium Justice and Solidarity: The European Utopia in a Globalising Era*, Kuopio 2.-3. September 2014. 2015

Laakkonen P, Pohjolainen S. **Frequency domain robust regulation of signals generated by an infinite-dimensional exosystem**. *SIAM Journal on Control and Optimization*. 2015;53(1):139-166. <https://doi.org/10.1137/130950057>

Turunen E, Navara M. **Infinitesimals and Pavelka logic**. In Alonso JM, Bustince H, Reformat M, editors, *PROCEEDINGS OF THE 2015 CONFERENCE OF THE INTERNATIONAL FUZZY SYSTEMS ASSOCIATION AND THE EUROPEAN SOCIETY FOR FUZZY LOGIC AND TECHNOLOGY*. PARIS: Atlantis Press. 2015. p. 1027-1033. (Advances in Intelligent Systems Research). <https://doi.org/10.2991/ifs-a-eusflat-15.2015.145>

Raunonen P, Casella E, Calders K, Murphy S, Åkerblom M, Kaasalainen M. **Massive-Scale Tree Modelling from TLS Data**. In Stilla U, Heipke C, editors, *ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences*. Vol. II-3/W4. GOTTINGEN: COPERNICUS GESELLSCHAFT MBH. 2015. p. 189-196. (International Archives of the Photogrammetry Remote Sensing and Spatial Information Sciences). <https://doi.org/10.5194/isprsannals-II-3-W4-189-2015>

Nurminen H, Koivisto M, Ali-Löyty S, Piche R. **Motion Model for Positioning with Graph-Based Indoor Map**. In 2014 International Conference on Indoor Positioning and Indoor Navigation (IPIN), 27-30 Oct. 2014, Busan, South Korea. Piscataway, NJ: IEEE. 2015. p. 646-655 <https://doi.org/10.1109/IPIN.2014.7275539>

Still K, Huhtamäki J, Russell MG. **New Insights for Relational Capital**. *Electronic Journal of Knowledge Management*. 2015;13(1):167-182.

Calders K, Newnham G, Burt A, Murphy S, Raunonen P, Herold M et al. **Nondestructive estimates of above-ground biomass using terrestrial laser scanning**. *Methods in Ecology and Evolution*. 2015;6(2):198-208. <https://doi.org/10.1111/2041-210X.12301>

Valmari A. **On constructibility and unconstructibility of LTS operators from other LTS operators**. *Acta Informatica*. 2015;52(2-3):207-234. <https://doi.org/10.1007/s00236-015-0217-2>

Paunonen L. **On Robustness of Strongly Stable Semigroups with Spectrum on $i\mathbb{R}$** . In Banasiak J, Bobrowski A, Lachowicz M, editors, *Semigroups of Operators -Theory and Applications*: Będlewo, Poland, October 2013. Springer International Publishing. 2015. p. 105-121. (Springer Proceedings in Mathematics & Statistics). <https://doi.org/10.1007/978-3-319-12145-1>

Paunonen L. **On Robust Output Regulation for Continuous-Time Periodic Systems**. In 2015 Proceedings of the SIAM Conference on Control and its Applications. SIAM, Society for Industrial and Applied Mathematics. 2015 <https://doi.org/10.1137/1.9781611974072.7>

Huhtamäki J, Russell MG, Rubens N, Still K. **Ostinato: The Exploration-Automation Cycle of User-Centric, Process-Automated Data-Driven Visual Network Analytics**. In Matei SA, Russell MG, Bertino E, editors, *Transparency in Social Media: Tools, Methods and Algorithms for Mediating Online Interactions*. Springer International Publishing. 2015. p. 197-222. (Computational Social Science). <https://doi.org/10.1007/978-3-319-18552-1>

Turunen E, Navara M. **Perfect Pavelka Logic**. *Fuzzy Sets and Systems*. 2015. <https://doi.org/10.1016/j.fss.2014.06.011>

Gibson-Robinson T, Hansen H, Roscoe AW, Wang X. **Practical Partial Order Reduction for CSP**. In *Nasa Formal Methods: 7th International Symposium, NFM 2015, Pasadena, CA, USA, April 27-29, 2015, Proceedings*. Vol. 9058. Springer International Publishing. 2015. p. 188-203. (Lecture Notes in Computer Science). https://doi.org/10.1007/978-3-319-17524-9_14

Viro E, Eriksson S-L. **Projektioppiminen yläkoulun matematiikassa**. *Lumat*. 2015;3(7):1005-1009.

Raumonen PA. **Quantitative structure tree models from terrestrial laser scanner data**. In *Proceedings of SilviLaser 2015: 14th conference on Lidar Applications for Assessing and Managing Forest Ecosystems*. 2015. p. 32-34

Calders K, Burt A, Newnham G, Disney M, Murphy S, Raumonen P et al. **Reducing uncertainties in above-ground biomass estimates using terrestrial laser scanning**. In *Proceedings of SilviLaser 2015: 14th conference on Lidar Applications for Assessing and Managing Forest Ecosystems*. 2015. p. 197-199

Paunonen L. **Robustness of strong stability of discrete semigroups**. *Systems and Control Letters*. 2015;75:35-40. <https://doi.org/10.1016/j.sysconle.2014.11.004>

Laakkonen P, Quadrat A. **Robust Regulation of SISO Systems: The Fractional Ideal Approach**. In *Proceedings of the SIAM Conference on Control and Its Applications (CT15)*. SIAM, Society for Industrial and Applied Mathematics. 2015. p. 311-318 <https://doi.org/10.1137/1.9781611974072.43>

Laakkonen P. **Robust Regulation Theory for Transfer Functions With a Coprime Factorization**. *IEEE Transactions on Automatic Control*. 2015. <https://doi.org/10.1109/TAC.2015.2497898>

Ojala P, Saarenrinne P, Miettinen J, Multanen P, Kiilunen J, Hietala J-P et al. **Simulointi nopeuttaa käyttöiän määrittystä**. *Promaint*. 2015;2:24-27.

Foldes S. **Some Ring Theory from Jenő Szegedi**. *Miskolc Mathematical Notes*. 2015;16(1):115-121.

Gonzalez de Tanago J, Bartholomeus H, Joseph S, Herold M, Avitabile V, Goodman R et al. **Terrestrial LiDAR and 3D tree Quantitative Structure Model for quantification of aboveground biomass loss from selective logging in a tropical rainforest of Peru**. In *Proceedings of SilviLaser 2015: 14th conference on Lidar Applications for Assessing and Managing Forest Ecosystems*. 2015. p. 119-121

Calders K, Disney M, Nightingale J, Origo N, Barker A, Raumonen PA et al. **Traceability of essential climate variables through forest stand reconstruction with terrestrial laser scanning**. In *Proceedings of SilviLaser 2015: 14th conference on Lidar Applications for Assessing and Managing Forest Ecosystems*. 2015. p. 122-124

Kiili K, Devlin K, Perttula A, Tuomi S, Lindstedt A. **Using video games to combine learning and assessment in mathematics education**. *International Journal of Serious Games*. 2015;2(4). <https://doi.org/10.17083/ijsg.v2i4.98>

Laarman A, Pater E, Van de Pol J, Hansen H. **Guard-based Partial Order Reduction**. *International Journal on Software Tools for Technology Transfer*. 2014 Dec;18(4):427-448. <https://doi.org/10.1007/s10009-014-0363-9>

Muller P, Wymeersch H, Piche R. **UWB Positioning with Generalized Gaussian Mixture Filters**. *IEEE Transactions on Mobile Computing*. 2014 Oct;13(10):2406-2414. <https://doi.org/10.1109/TMC.2014.2307301>

Ruusuvuori P, Paavolainen L, Rutanen K, Maki A, Huttunen H, Marjomaki V. **Quantitative Analysis of Dynamic Association in Live Biological Fluorescent Samples**. PLoS ONE. 2014 Apr 11;9(4). 94245. <https://doi.org/10.1371/journal.pone.0094245>

Majjala P. **A Measurement-based Statistical Model to Evaluate Uncertainty in Long-range Noise Assessments**. VTT, 2014. 178 p. (VTT Science).

Åkerblom M, (ed.). **20th Inverse Days 2014, Tampere 9th-11th December 2014: Abstracts**. Tampere University of Technology, Department of Mathematics, 2014. 38 p. (Tampere University of Technology. Department of Mathematics. Research Report).

Hansen H, Timmer M. **A comparison of confluence and ample sets in probabilistic and non-probabilistic branching time**. Theoretical Computer Science. 2014;528:103-123. <https://doi.org/10.1016/j.tcs.2013.07.014>

Chen L, Piche R, Kuusniemi H, Chen R. **Adaptive mobile tracking in unknown non-line-of-sight conditions with application to digital TV networks**. Eurasip Journal on Advances in Signal Processing. 2014;2014. UNSP 22. <https://doi.org/10.1186/1687-6180-2014-22>

Muller P, Raitoharju M, Piche R. **A field test of parametric WLAN-fingerprint-positioning methods**. In 17th International Conference on Information Fusion (FUSION), 7-10 July 2014, Salamanca, Spain. Piscataway: Institute of Electrical and Electronics Engineers. 2014. p. 1-8

Piche R, Koivisto M. **A method to enforce map constraints in a particle filter's position estimate**. In 2014 11th Workshop on Positioning, Navigation and Communication (WPNC), 12-13 March 2014, Dresden, Germany. IEEE. 2014 <https://doi.org/10.1109/WPNC.2014.6843284>

Turunen E. **An algebraic study of Peterson's Intermediate Syllogisms**. Soft Computing. 2014;1-14. <https://doi.org/10.1007/s00500-013-1216-2>

Paunonen L, Pohjolainen S. **A New Controller Structure for Robust Output Regulation**. In Proceedings of the 53rd IEEE Conference on Decision and Control, IEEE CDC 2014, 15-17 December, 2014, Los Angeles, CA, USA. IEEE. 2014. p. 4721-4726. (IEEE Conference on Decision and Control).

Rodriguez JT, Turunen E, Ruan D, Montero J. **Another paraconsistent algebraic semantics for Lukasiewicz-Pavelka logic**. Fuzzy Sets and Systems. 2014;242:132-147. <https://doi.org/10.1016/j.fss.2013.06.011>

Virtanen S, Penttinen J-P, Kiiski M, Jokinen J. **Application of Design Review to Probabilistic Risk Assessment in a Large Investment Project**. In Proceedings of the Probabilistic Safety Assessment and Management PSAM12, June 2014, Honolulu, Hawaii. 2014. p. 1-12

Zhang X, Piche R. **Application of Hill-Clohessy-Wiltshire Equation in GNSS Orbit Prediction**. In Nurmi J, Ruotsalainen L, Lohan E-S, Salcedo J, Thombre S, editors, Proceedings of 2014 International Conference on Localization and GNSS (ICL-GNSS), Helsinki, Finland, June 24-26, 2014. Piscataway: IEEE. 2014. p. 1-6 <https://doi.org/10.1109/ICL-GNSS.2014.6934162>

Valmari A. **A Simple Character String Proof of the "True but Unprovable" Version of Gödel's First Incompleteness Theorem**. Electronic Proceedings in Theoretical Computer Science. 2014;151:355-369. 25. <https://doi.org/10.4204/EPTCS.151.25>

Eriksson S-L, Vainio J. **Bagdad - matematiikkaa täältä ikuisuuteen matematiikkanäyttely**. Lumat. 2014;2(1):17-46.

Nurminen H. **Bayesian Methods for Hybrid Indoor Positioning**. In IPIN 2014 - 5th International Conference on Indoor Positioning and Indoor Navigation, 27th - 30 th October, 2014, Busan, South Korea. 2014

Kaasalainen S, Krooks A, Liski J, Raunonen P, Kaartinen H, Kaasalainen M et al. **Change Detection of Tree Biomass with Terrestrial Laser Scanning and Quantitative Structure Modelling**. Remote Sensing. 2014;6(5):3906-3922. <https://doi.org/10.3390/rs6053906>

Major L. **Combinational Studies of Vectors and Sequences**. Tampere: Tampere University of Technology, 2014. 73 p. (Tampere University of Technology. Publication).

Pursiainen S, Kaasalainen M. **Detection of anomalies in radio tomography of asteroids: source count and forward errors**. Planetary and Space Science. 2014;99:36-47. <https://doi.org/10.1016/j.pss.2014.04.017>

Ivanov P, Ali-Löyty S, Piche R. **Evaluating the Consistency of Estimation**. In Proceedings of 2014 International Conference on Localization and GNSS (ICL-GNSS), Helsinki, Finland, June 24-26, 2014. Piscataway: IEEE. 2014 <https://doi.org/10.1109/ICL-GNSS.2014.6934171>

Ala-Luhtala J, Piche R. **Gaussian Scale Mixture Models For Robust Linear Multivariate Regression With Missing Data**. Communications in Statistics: Simulation and Computation. 2014. <https://doi.org/10.1080/03610918.2013.875565>

Liski J, Kaasalainen S, Raunonen P, Akujärvi A, Krooks A, Repo A et al. **Indirect Emissions of Forest Bioenergy: Detailed Modelling of Stump-Root Systems**. Global Change Biology Bioenergy. 2014;6(6):777-784. <https://doi.org/10.1111/gcbb.12091>

Eriksson S-L, Orelma H, Nelson V. **Integral Formulas for k-hypermonogenic Functions in R3**. In Hypercomplex Analysis: New Perspectives and Applications. Springer. 2014. p. 119-132. (Trends in Mathematics). https://doi.org/10.1007/978-3-319-08771-9_8

Medina J, Turunen E, Bartl E, Diaz-Moreno JC. **Minimal Solutions of Fuzzy Relation Equations with General Operators on the Unit Interval**. In Information Processing and Management of Uncertainty in Knowledge-Based Systems. 15th International Conference, IPMU 2014, Montpellier, France, July 15-19, 2014, Proceedings, Part III. Communications in Computer and Information Science. Springer International Publishing. 2014. p. 81-90. (Communications in Computer and Information Science). https://doi.org/10.1007/978-3-319-08852-5_9

Janka M, Raunonen P, Tuukkanen S, Lupo D. **Modelling of Joule heating based self-alignment method for metal grid line passivation**. In 2013 MRS Fall Meeting - Symposium M - Large-Area Processing and Patterning for Active Optical and Electronic Devices. MATERIALS RESEARCH SOCIETY. 2014 <https://doi.org/10.1557/opl.2014.127>

Jussila J, Kärkkäinen H, Kortelainen S, Huhtamäki J, Aho T, Tebest T. **New era of Business Analytics - Making sense of business ecosystems**. In Lugmayr A, Franssila H, Paavilainen J, editors, Academic MindTrek Conference 2014, Tampere, Finland, November 4-6, 2014. New York, NY: ACM. 2014. p. 276-278. (MindTrek Conference). <https://doi.org/10.1145/2676467.2676517>

Valmari A, Hansen H. **Old and New Algorithms for Minimal Coverability Sets**. Fundamenta Informaticae. 2014;131(1):1-25. <https://doi.org/10.3233/FI-2014-1002>

Särkkä S, Piche R. **On Convergence and Accuracy of State-Space Approximations of Squared Exponential Covariance Functions**. In 2014 IEEE International Workshop on Machine Learning for Signal Processing (MLSP), September 21-24, 2014, Reims, France. Piscataway: Institute of Electrical and Electronics Engineers. 2014. p. 1-6 <https://doi.org/10.1109/MLSP.2014.6958890>

Paunonen L, Laakkonen P. **On polynomial stability of linear systems**. In 21st International Symposium on Mathematical Theory of Networks and Systems, MTNS 2014, July 7-11, 2014, Groningen, the Netherlands. Groningen, the Netherlands: University of Groningen. 2014. p. 233-238. (International Symposium on Mathematical Theory of Networks and Systems).

Hämäläinen T, Pohjolainen S. **On the Structure of Robust Controllers for Infinite-Dimensional Systems**. In 21st International Symposium on Mathematical Theory of Networks and Systems, MTNS 2014, July 7-11, 2014, Groningen, The Netherlands. Groningen, the Netherlands: University of Groningen. 2014. p. 938-941

Eriksson S-L, Orelma H. **On Vekua Systems and Their Connections to Hyperbolic Function Theory in the Plane**. *Advances in Applied Clifford Algebras*. 2014;24(4):1027-1038. <https://doi.org/10.1007/s00006-014-0507-8>

Wirola L, Laine T, Raitoharju M, Sirola N, inventors. **Optimal storage scheme for access point coverage data**. Pat. US 8 816 908 B2. 2014.

Janka M, Saukko E, Raunonen P, Lupo D. **Optimization of large-area OLED current distribution grids with self-aligned passivation**. *Organic Electronics*. 2014;15(12):3431-3438. <https://doi.org/10.1016/j.orgel.2014.09.028>

Paunonen L. **Polynomial stability of semigroups generated by operator matrices**. *Journal of Evolution Equations*. 2014;14(4):885-911. <https://doi.org/10.1007/s00028-014-0243-5>

Krooks A, Kaasalainen S, Kankare V, Joensuu M, Raunonen P, Kaasalainen M. **Predicting tree structure from tree height using terrestrial laser scanning and quantitative structure models**. *Silva Fennica*. 2014;48(2):1-11. 1125. <https://doi.org/10.14214/sf.1125>

Paunonen L, Pohjolainen S. **Robust controller design for infinite-dimensional exosystems**. *International Journal of Robust and Nonlinear Control*. 2014;24(5):825-858. <https://doi.org/10.1002/rnc.2920>

Laakkonen P, Pohjolainen S. **Robustness of Controllers for SISO-Plants and Signals Generated by an Infinite-Dimensional Exosystem**. In 19th International Conference on Methods and Models in Automation and Robotics, MMAR 2014, Miedzyzdroje, Poland, September 2-5, 2014. IEEE. 2014. p. 538-543. (International conference on methods and models in automation and robotics). <https://doi.org/10.1109/MMAR.2014.6957411>

Paunonen L. **Robustness of strong stability of semigroups**. *Journal of Differential Equations*. 2014;257(12):4403-4436. <https://doi.org/10.1016/j.jde.2014.08.011>

Viikinkoski M, Kaasalainen M. **Shape reconstruction from images: Pixel fields and Fourier transform**. *Inverse Problems and Imaging*. 2014;8(3):885-900. <https://doi.org/10.3934/ipi.2014.8.885>

Pursiainen S, Kaasalainen M. **Sparse source travel-time tomography of a laboratory target: accuracy and robustness of anomaly detection**. *Inverse Problems*. 2014;30(11):1-19. 114016. <https://doi.org/10.1088/0266-5611/30/11/114016>

Kaasalainen M. **Taivaalliset projektiot: terapiaa inversio-ongelmalle**. *Arkhimedes*. 2014;(4):25-31.

Foldes S, Major L. **The Cauchy-Schwarz inequality in Cayley graph and tournament structures on finite fields**. *Miskolc Mathematical Notes*. 2014;15(1):153-158.

Paunonen L, Pohjolainen S. **The Internal Model Principle for Systems with Unbounded Control and Observation**. *SIAM Journal on Control and Optimization*. 2014;52(6):3967-4000. <https://doi.org/10.1137/130921362>

Marchis F, Durech J, Castillo-Rogez J, Vachier F, Cuk M, Berthier J et al. **The puzzling mutual orbit of the binary Trojan asteroid (624) Hektor**. *Astrophysical Journal Letters*. 2014;783(2). <https://doi.org/10.1088/2041-8205/783/2/L37>

Paunonen L. **The Role of Exosystems in Output Regulation**. *IEEE Transactions on Automatic Control*. 2014;59(8):2301-2305. <https://doi.org/10.1109/TAC.2014.2303214>

Smith A, Astrup R, Raunonen P, Liski J, Krooks A, Kaasalainen S et al. **Tree Root System Characterization and Volume Estimation by Terrestrial Laser Scanning and Quantitative Structure Modeling**. *Forests: Open Access Journal*. 2014;5:3274-3294. <https://doi.org/10.3390/f5123274>

Aramo-Immonen H, Jussila J, Huhtamäki J. **Visualizing informal learning behavior from conference participants Twitter data**. In Francisco Jose G-P, editor, *Second International Conference on Technological Ecosystems for Enhancing Multiculturality, TEEM 2014, Salamanca, Spain, October 1-3, 2014*. New York, NY: ACM. 2014. p. 603-610. (International Conference on Technological Ecosystems for Enhancing Multiculturality). <https://doi.org/10.1145/2669711.2669962>

Jussila J, Huhtamäki J, Henttonen K, Kärkkäinen H, Still K. **Visual network analysis of Twitter data for co-organizing conferences: case CMAD 2013**. In 47th Hawaii International Conference on System Sciences, HICSS 2014, 6.-9.1.2014, Waikoloa, HI. Computer Society Press. 2014. p. 1474-1483. (Annual Hawaii International Conference on System Sciences). <https://doi.org/10.1109/HICSS.2014.190>

Laakkonen P. **Robust Regulation for Infinite-Dimensional Systems and Signals in the Frequency Domain**. Tampere: Tampere University of Technology, 2013. 146 p. (Tampere University of Technology. Publication).

Eriksson S-L. **A Hyperbolic Dirac Operator and its Kernels**. *Complex Variables and Elliptic Equations*. 2013;58(6):767-781. <https://doi.org/10.1080/17476933.2011.620096>

Raitoharju M, Nurminen H, Piche R. **A linear state model for PDR+WLAN positioning**. In Morawiec A, Hinderscheit J, editors, *Proceedings of the 2013 Conference on Design and Architectures for Signal and Image Processing DASIP Cagliari, Italy, October 8-10, 2013*. Belmont France: European Electronic Chips & Systems Design Initiative (ECSI). 2013. p. 113-118. (Conference on Design and Architectures for Signal and Image Processing).

Paunonen L, Zwart H. **A Lyapunov approach to strong stability of semigroups**. *Systems and Control Letters*. 2013;62(8):673-678. <https://doi.org/10.1016/j.sysconle.2013.05.001>

Kaleva O, Kauhanen J. **A note on compactness in a fuzzy metric space**. *Fuzzy Sets and Systems*. 2013;135-139. 238. <https://doi.org/10.1016/j.fss.2013.05.014>

Foldes S, Woodroffe R. **Antichain Cutsets of Strongly Connected Posets**. *Order: A Journal on the Theory of Ordered Sets and Its Applications*. 2013;30(2):351-361. <https://doi.org/10.1007/s11083-012-9248-2>

Wirola L, Wirola L, Piche R. **Bandwidth and Storage Reduction of Radio Maps for Offline WLAN Positioning**. In *International Conference on Indoor Positioning and Indoor Navigation, IPIN 2013, 28-31 Oct 2013, Montbéliard-Belfort, France*. Piscataway, NJ: IEEE. 2013. p. 665-673. (International Conference on Indoor Positioning and Indoor Navigation).

Piche R, Järvenpää M, Turunen E, Simunek M. **Bayesian analysis of GUHA hypotheses**. *Journal of Intelligent Information Systems*. 2013;42(1):47-73. <https://doi.org/10.1007/s10844-013-0255-6>

Kaasalainen M, Potapov I, Raunonen P, Åkerblom M, Sievänen R, Kaasalainen S. **Bayes trees and forests: combining precise empirical and theoretical tree models**. In Sievänen R, Nikinmaa E, Godin C, Lintunen A, Nygren P, editors, *7th International Conference on Functional-Structural Plant Models, FSPM2013, FSPM2013, 9.-14.6.2013, Saariselkä, Finland*. Vantaa: Finnish Society of Forest Science; Finnish Forest Research Institute; University of Helsinki. 2013. p. 61-63. (International Conference on Functional-Structural Plant Models).

Laakso T, Kaasalainen M. **Canonical methods of constructing invariant tori by phase-space sampling**. *Physica D: Nonlinear Phenomena*. 2013;243(1):14-19. <https://doi.org/10.1016/j.physd.2012.09.010>

Salonen J, Huhtamäki J, Nykänen O. **Challenges in Heterogeneous Web Data Analytics - Case Finnish Growth Companies in Social Media**. In 17th International Academic MindTrek Conference, October 1-4, 2013, Tampere, Finland. ACM. 2013. p. 131-138. (MindTrek Conference). <https://doi.org/10.1145/2523429.2523481>

Kaasalainen M, Nortunen H. **Compact YORP formulation and stability analysis**. *Astronomy and Astrophysics*. 2013;558:1-8. A104. <https://doi.org/10.1051/0004-6361/201322221>

Nykänen O. **Datamap Visualization Technique for Interactively Visualizing Large Datasets**. In Lugmayr A, Franssila H, Kärkkäinen H, Paavilainen J, editors, 17th International Academic MindTrek Conference, October 1-4, 2013, Tampere, Finland. ACM. 2013. p. 52-58. (MindTrek Conference). <https://doi.org/10.1145/2523429.2523458>

Laoudias C, Piche R, Panayiotou CG. **Device self-calibration in location systems using signal strength histograms**. *Journal of Location Based Services*. 2013;7(3):165-181. <https://doi.org/10.1080/17489725.2013.816792>

Calders K, Newnham G, Herold M, Murphy S, Culvenor D, Raunonen P et al. **Estimating Above Ground Biomass from Terrestrial Laser Scanning in Australian Eucalypt Open Forest**. In 13th International Conference on LiDAR Applications for Assessing Forest Ecosystems, SilviLaser 2013, 9.-11.10.2013. Beijing, China. Beijing, China: Silvilaser Beijing 2013. 2013. p. 1-7. (International Conference on LiDAR Applications for Assessing Forest Ecosystems).

Ala-Luhtala J, Seppänen M, Ali-Löyty S, Piche R, Nurminen H. **Estimation of initial state and model parameters for autonomous GNSS orbit prediction**. In International Global Navigation Satellite Systems Society IGSS Symposium 2013, 16-18 July, 2013, Gold Coast, Queensland, Australia. Tweed Heads, NSW, Australia: IGSS Society. 2013. p. 1-15

Piche R. **Estimation of Model Parameters**. In Yang X-S, editor, *Mathematical Modeling with Multidisciplinary Applications*. Hoboken, NJ, USA: John Wiley & Sons. 2013. p. 169-190

Rautakorpi P, Argatov I, Silvennoinen R. **Estimation of the Mechanical Power of a Kite Wind Generator**. In Lohani SP, editor, *Renewable Energy for Sustainable Future*. Hong Kong: ICONCEPT PRESS. 2013. p. 1-28

Raunonen P, Casella E, Disney M, Åkerblom M, Kaasalainen M. **Fast Automatic Method for Constructing Topologically and Geometrically Precise Tree Models from TLS Data**. In Sievänen R, Nikinmaa E, Godin C, Lintunen A, Nygren P, editors, 7th International Conference on Functional-Structural Plant Models, FSPM2013, 9.-14.6.2013, Saariselkä, Finland. Vantaa: Finnish Society of Forest Science; Finnish Forest Research Institute; University of Helsinki. 2013. p. 89-91. (International Conference on Functional-Structural Plant Models).

Raunonen P, Kaasalainen M, Åkerblom M, Kaasalainen S, Kaartinen H, Vastaranta M et al. **Fast automatic precision tree models from terrestrial laser scanner data**. *Remote Sensing*. 2013;5(2):491-520. <https://doi.org/10.3390/rs5020491>

Eriksson S-L, Orelma H. **Hyperbolic Laplace Operator and the Weinstein Equation in R^3** . *Advances in Applied Clifford Algebras*. 2013;1-16. <https://doi.org/10.1007/s00006-013-0425-1>

Pohjolainen S, Nykänen O, Venho J, Kangas J. **Improving engineering students' mathematics skills and analysing their behaviour using ICT - tools**. In Proceedings of annual SEFI Conference, 16-20 September 2013, Leuven, Belgium. Brussels, Belgium: European Society for Engineering Education SEFI. 2013. p. 1-8. 163. (Annual Conference of the European Society for Engineering Education).

Jussila J, Huhtamäki J, Kärkkäinen H, Still K. **Information visualization of Twitter data for co-organizing conferences**. In 17th International Academic MindTrek Conference, October 1-4, 2013, Tampere, Finland. New York, NY: ACM. 2013. p. 139-145. (MindTrek Conference). <https://doi.org/10.1145/2523429.2523482>

Piche R. **Introduction to Statistical Data Analysis for Engineers and Scientists**. Las Vegas, NV, USA: CREATESPACE, 2013. 136 p.

Pursiainen S, Kaasalainen M. **Iterative alternating sequential (IAS) method for radio tomography of asteroids in 3D**. *Planetary and Space Science*. 2013;82-83:84-98. <https://doi.org/10.1016/j.pss.2013.04.001>

Rutanen K, Gomez-Herrero G, Eriksson S-L, Egiazarian K. **Least-Squares Transformations between Point-Sets**. In Kämäräinen J-K, Koskela M, editors, Image Analysis, 18th Scandinavian Conference, SCIA 2013, Espoo, Finland, June 17-20, 2013, Proceedings. Berlin: Springer. 2013. p. 501-511. (Lecture Notes in Computer Science). https://doi.org/10.1007/978-3-642-38886-6_47

Stenvall A, Tarhasaari T, Grilli F, Raunonen P, Vojenciak M, Pellikka M. **Manifolds in electromagnetism and superconductor modelling: Using their properties to model critical current of twisted conductors in self-field with 2-D model**. Cryogenics. 2013;53:135-141. <https://doi.org/10.1016/j.cryogenics.2012.06.005>

Joutsenlahti J, Sarikka H, Kangas J, Harjulehto P. **Matematiikan kirjallinen kielentäminen yliopiston matematiikan opetuksessa**. In Hähkiöniemi M, Leppäaho H, Nieminen P, Viiri J, editors, Matematiikan ja luonnontieteiden opetuksen tutkimusseuran konferenssijulkaisu 2012. Tutkimuksia / Jyväskylän yliopisto, opettajankoulutuslaitos. Jyväskylä: University of Jyväskylä. 2013. p. 59-70. (The annual conference of Finnish Mathematics and Science Education Research Association, November 8-9, 2012, Jyväskylä, Finland).

Eriksson S-L, Orelma H. **Mean Value Properties for the Weinstein Equation Using the Hyperbolic Metric**. Complex Analysis and Operator Theory. 2013;7(5):1609-1621. <https://doi.org/10.1007/s11785-012-0280-4>

Still K, Huhtamäki J, Russell MG, Basole RC, Salonen J, Rubens N. **Networks of innovation relationships: multiscopic views on Finland**. In Huizingh KRE, Conn S, Torkkeli M, Schneider S, Bitran I, editors, XXIV ISPIM Conference, Innovating in Global Markets: Challenges for Sustainable Growth, 16-19 June 2013, Helsinki, Finland. Manchester, UK: International Society for Professional Innovation Management ISPIM. 2013. p. 1-15. (International Society for Professional Innovation Management Conference).

Saarinen J, Andreasson H, Stoyanov T, Ala-Luhtala J, Lilienthal AJ. **Normal Distributions Transform Occupancy Maps: Application to Large-Scale Online 3D Mapping**. In 2013 IEEE International conference on Robotics and Automation, ICRA, May 6-10, 2013, Karlsruhe, Germany. Piscataway, NJ: IEEE. 2013. p. 2233-2238. (IEEE International Conference on Robotics and Automation). <https://doi.org/10.1109/ICRA.2013.6630878>

Eriksson S-L, Orelma H. **On Hodge-de Rham systems in hyperbolic Clifford analysis**. In 11th International Conference of Numerical Analysis and Applied Mathematics, ICNAAM 2013, 21-27 September 2013, Rhodes, Greece. American Institute of Physics AIP. 2013. p. 492-495. (AIP Conference Proceedings). <https://doi.org/10.1063/1.4825535>

Eriksson S-L, Orelma H. **On hypermonogenic functions**. Complex Variables and Elliptic Equations. 2013;58(7):975-990. <https://doi.org/10.1080/17476933.2011.613118>

Hämäläinen T, Pohjolainen S. **On the Structure of Robust Controllers for Infinite-Dimensional Systems**. In 12th European Control Conference, ECC 2013, Zürich, Switzerland, 17.-19.7.2013. Zürich, Sveitsi: European Control Association EUCA. 2013. p. 59-62. (European Control Conference).

Paunonen L, Pohjolainen S. **Output Regulation Theory for Distributed Parameter Systems with Unbounded Control and Observation**. In 52nd IEEE Conference on Decision and Control, IEEE CDC 2013, December 10-13, 2013, Florence, Italy. Piscataway, NJ: IEEE. 2013. p. 1083-1088. (IEEE Conference on Decision and Control).

Nurminen H, Ristimäki A, Ali-Löytty S, Piche R. **Particle filter and smoother for indoor localization**. In International Conference on Indoor Positioning and Indoor Navigation, IPIN 2013, 28-31 Oct 2013, Montbéliard-Belfort, France. Piscataway, NJ: IEEE. 2013. p. 137-146. (International Conference on Indoor Positioning and Indoor Navigation). <https://doi.org/10.1109/IPIN.2013.6817903>

Huhtamäki J, Luotonen V, Kairamo V, Still K, Russell MG. **Process for Measuring and Visualizing an Open Innovation Platform: Case Demola**. In 17th International Academic MindTrek Conference, October 1-4, 2013, Tampere, Finland. ACM. 2013. p. 166-171. (MindTrek Conference). <https://doi.org/10.1145/2523429.2523478>

Burt A, Disney M, Raunonen P, Armston J, Calders K, Lewis P. **Rapid Characterisation of Forest Structure from TLS and 3D Modelling**. In 2013 IEEE International Geoscience & Remote Sensing Symposium, IGARSS 2013, Melbourne, Australia, July 21-26, 2013. Piscataway, NJ: IEEE. 2013. p. 1-4. (IEEE International Geoscience and Remote Sensing Symposium).

Paunonen L, Pohjolainen S. **Reduced order internal models in robust output regulation**. IEEE Transactions on Automatic Control. 2013;58(9):2307-2318. <https://doi.org/10.1109/TAC.2013.2257596>

Forma J, Niemi JA, Ruotsalainen U. **Regional compensation for statistical maximum likelihood reconstruction error of PET image pixels**. Physics in Medicine and Biology. 2013;58(14):4849-4864. <https://doi.org/10.1088/0031-9155/58/14/4849>

Still K, Huhtamäki J, Russell MG. **Relational Capital and Social Capital: One or two Fields of Research?** In Green A, editor, Proceedings of the 10th International Conference on Intellectual Capital, Knowledge Management and Organisational Learning, ICICKM 2013, Washington, DC, USA, October 24-25, 2013. Reading, UK: Academic Conferences and Publishing International Limited. 2013. p. 420-428. (International Conference on Intellectual Capital, Knowledge Management and Organisational Learning).

Paunonen L. **Robustness of polynomial stability with respect to unbounded perturbations**. Systems and Control Letters. 2013;62(4):331-337. <https://doi.org/10.1016/j.sysconle.2013.01.005>

Paunonen L, Pohjolainen S. **Robustness properties of controllers with reduced order internal models**. In 12th European Control Conference, ECC 2013, Zürich, Switzerland, 17.-19.7.2013. Zürich, Switzerland: European Control Association EUCA. 2013. p. 578-583. (European Control Conference).

Paunonen L, Pohjolainen S. **Robust output regulation and the preservation of polynomial closed-loop stability**. International Journal of Robust and Nonlinear Control. 2013;1-28. <https://doi.org/10.1002/rnc.3064>

Müller J, Shoemaker C, Piche R. **SO-I: a surrogate model algorithm for expensive nonlinear integer programming problems including global optimization applications**. Journal of Global Optimization. 2013;1-25. <https://doi.org/10.1007/s10898-013-0101-y>

Laakkonen P, Pohjolainen S. **Solvability of the output regulation problem with a feedforward controller**. In 12th European Control Conference, ECC 2013, Zürich, Switzerland, 17.-19.7.2013. Zürich, Sveitsi: European Control Association EUCA. 2013. p. 560-565. (European Control Conference).

Müller J, Shoemaker C, Piche R. **SO-MI: A surrogate model algorithm for computationally expensive nonlinear mixed-integer black-box global optimization problems**. Computers and Operations Research. 2013;40(5):1383-1400. <https://doi.org/10.1016/j.cor.2012.08.022>

Nurminen H, Talvitie J, Ali-Löytty S, Muller P, Lohan E-S, Piche R et al. **Statistical Path Loss Parameter Estimation and Positioning using RSS Measurements**. Journal of Global Positioning Systems. 2013;12(1):13-27.

Kanniainen J, Piche R. **Stock Price Dynamics and Option Valuations under Volatility Feedback Effect**. Physica A: Statistical Mechanics and Its Applications. 2013;392(4):722-740. <https://doi.org/10.1016/j.physa.2012.10.004>

Mäki-Marttunen T, Acimovic J, Linne M-L, Ruohonen K. **Structure-Dynamics Relationships in Bursting Neuronal Networks Revealed Using a Prediction Framework**. PLoS ONE. 2013;8(7):1-16. e69373. <https://doi.org/10.1371/journal.pone.0069373>

Valmari A. **The Asymptotic Behaviour of the Proportion of Hard Instances of the Halting Problem**. In Kiss A, editor, SPLST '13, 13th Symposium on Programming Languages and Software Tools, August 26-27, 2013, Szeged, Hungary. Szeged, Hungary: University of Szeged. 2013. p. 170-184. (Symposium on Programming Languages and Software Tools).

Foldes S. **The Kraft Sum as a Monotone Function of the Refinement-Ordered Set of Uniquely Decipherable Codes.** Mathematics for Applications. 2013;2(1):1-4.

Merline WJ, Drummond JD, Carry B, Conrad A, Tamblyn PM, Dumas C et al. **The Resolved Asteroid Program – Size, shape, and pole of (52) Europa.** Icarus. 2013;225(1):794-805. <https://doi.org/10.1016/j.icarus.2013.01.010>

Turunen E. **Tiedonlouhintaa tieliikenneonnettomuussatasta.** Liikenne. 2013;31(2):7-8.

Vainikka E, Noppari E, Heinonen A, Huhtamäki J. **Twitteriä ja uutispäivittelyä - toimittajana sosiaalisessa mediassa.** Tampereen yliopisto. Viestinnän, median ja teatterin yksikkö. Journalismin, viestinnän ja median tutkimuskeskus, COMET, 2013. 113 p.

Major L. **Unimodality and log-concavity of f-vectors for cyclic and ordinary polytopes.** Discrete Applied Mathematics. 2013;161(10-11):1669-1672. <https://doi.org/10.1016/j.dam.2013.01.008>

Huhtamäki J, Parviainen O. **Verkostoanalyysi sosiaalisen median tutkimuksessa.** In Laaksonen S-M, Matikainen J, Tikka M, editors, Otteita verkosta - verkon ja sosiaalisen median tutkimusmenetelmät. 1 ed. Tampere: Vastapaino. 2013. p. 245-273

Nykänen O, Koskinen KT, Ranta P, Salonen J, Aaltonen J, Nurmi J et al. **Virtuaalinen konelaboratorio ja semanttinen mallinnus konejärjestelmän suunnittelun tukena, Loppuraportti, Semogen II -hanke.** Tampere: Tampereen teknillinen yliopisto, Smart Simulators -tutkimusryhmä, 2013. 50 p.

Kaasalainen M, Durech J. **What's out there? Asteroid models for target selection and mission planning.** In Badescu V, editor, Asteroids: prospective energy and material resources. Heidelberg: Springer. 2013. p. 131-150
<https://doi.org/10.1007/978-3-642-39244-3>

Hämäläinen T. **A review on old and new results on robust regulation of DPS with infinite-dimensional exosystems.** 2012. Paper presented at Matematiikan päivät, 4-5.1.2012, Lappeenrannan Teknillinen Yliopisto, .

Kaleva O. **A characterization of level-continuous fuzzy numbers.** Fuzzy Sets and Systems. 2012;209:84-88.
<https://doi.org/10.1016/j.fss.2012.07.002>

Huttunen V, Piche R. **A Molecular Camera Gyroscope.** Giroskopiya I Navigatsiya. 2012;77:69-81.

Huttunen V, Piche R. **A Monocular Camera Gyroscope.** Gyroscopy and Navigation. 2012;3(2):124-131.
<https://doi.org/10.1134/S2075108712020046>

Raitoharju M, Ali-Löytty S. **An Adaptive Derivative Free Method for Bayesian Posterior Approximation.** IEEE Signal Processing Letters. 2012;19(2):87-90. 12436433. <https://doi.org/10.1109/LSP.2011.2179800>

Durech J, Vokrouhlicky D, Baransky AR, Breiter S, Burkhonov OA, Cooney W et al. **Analysis of the rotation period of asteroids (1865) Cerberus, (2100) Ra-Shalom, and (3103) Eger - search for the YORP effect.** Astronomy and Astrophysics. 2012;547:9. A10. <https://doi.org/10.1051/0004-6361/201219396>

Still K, Huhtamäki J, Isomursu M, Lahti J, Koskela-Huotari K. **Analytics of the impact of user involvement in the innovation process and its outcomes. Case study: Media-Enhanced Learning (MEL) Service.** Procedia: Social and Behavioral Sciences. 2012;46:1740-1746. <https://doi.org/10.1016/j.sbspro.2012.05.370>

Ala-Luhtala J, Seppänen M, Piche R. **An empirical solar radiation pressure model for autonomous GNSS orbit prediction.** In 2012 IEEE/ION Position Location and Navigation Symposium PLANS, 23-26 April 2012, Myrtle Beach, SC, USA. Piscataway, NJ: Institute of Electrical and Electronics Engineers IEEE. 2012. p. 568-575. 12863831. (IEEE/ION Position Location and Navigation Symposium). <https://doi.org/10.1109/PLANS.2012.6236929>

Turunen E, Tchikapa N, Lele C. **A New Characterization for n-Fold Positive Implicative BL-logics**. In Greco S, Bouchon-Meunier B, Coletti G, Fedrizzi M, Matarazzo B, Yager RR, editors, *Advances on Computational Intelligence 14th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems, IPMU 2012, Catania, Italy, July 9-13, 2012. Proceedings, Part I. Communications in Computer and Information Science*. Berlin Heidelberg: Springer. 2012. p. 552-560. (International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems). https://doi.org/10.1007/978-3-642-31709-5_56

Helminen M, Salonen J, Saha H, Nykänen O, Koskinen KT, Ranta P et al. **A New Method and Format for Describing CANopen System Topology**. In Proceedings of the 13th International CAN Conference, iCC 2012 in Hambach Castle, March 5 to March 6, Germany. CAN in Automation e.V. 2012. p. 1-8. (International CAN Conference).

Jorda L, Lamy P, Gaskell R, Kaasalainen M, Groussin O, Besse S et al. **Asteroid (2867) Steins: Shape, topography and global physical properties from OSIRIS observations**. *Icarus*. 2012;221(2):1089-1100. <https://doi.org/10.1016/j.icarus.2012.07.035>

Müller J, Shoemaker C, Piche R. **A Stochastic Mixture Surrogate Model Algorithm for Computationally Expensive Black-Box Global Optimization Problems**. In Proceedings of Global Optimization Workshop 2012, 26-29 June 2012, Natal, Brazil. Natal, Brazil: Universidade Federal do Rio Grande do Norte. 2012. p. 1-4. (Global Optimization Workshop).

Silvennoinen R, Argatov I. **Asymptotic modeling of unconstrained control of a tethered power kite moving along a given closed-loop spherical trajectory**. *Journal of Engineering Mathematics*. 2012;72(1):187-203. <https://doi.org/10.1007/s10665-011-9475-3>

Seppänen M, Ala-Luhtala J, Piche R, Martikainen S, Ali-Löytty S. **Autonomous Prediction of GPS and GLONASS Satellite Orbits**. *Navigation*. 2012;59(2):119-134. <https://doi.org/10.1002/navi.10>

Turunen E, Lele C, Tchikapa N. **Characterizing n-Fold Positive Implicative BL-logics**. In ManyVal'12 In Honour of Antonio Di Nola's 65th Birthday, Salerno, Italy, 4.7.7.2012. 2012. p. 60-64. (ManyVal).

Åkerblom M, Raunonen P, Kaasalainen M, Kaasalainen S, Kaartinen H. **Comprehensive Quantitative Tree Models from TLS Data**. In IEEE International Geoscience and Remote Sensing Symposium, IGARSS, 2012, 22.-27.7.2012, Munich, Germany. Piscataway, NJ: Institute of Electrical and Electronics Engineers IEEE. 2012. p. 6507-6510. 13133382. (IEEE International Geoscience and Remote Sensing Symposium). <https://doi.org/10.1109/IGARSS.2012.6352751>

Laakkonen P, Paunonen L, Pohjolainen S. **Dual Look at Robust Regulation: Frequency Domain and State Space Approaches**. In Proceedings of MMAR 2012. 17th International Conference on Methods and Models in Automation & Robotics, MMAR 2012, 27-30 August 2012, Miedzyzdroje, Poland. Piscataway, NJ: Institute of Electrical and Electronics Engineers IEEE. 2012. p. 136-141. 13117991. (International Conference on Methods and Models in Automation & Robotics). <https://doi.org/10.1109/MMAR.2012.6347929>

Piche R. **Elementary Partial Differential Equations. Theory and Solved Problems**. Saarbrücken, Germany: Lambert Academic Publishing, 2012. 131 p.

Pesonen H, Piche R. **Estimation of Linear Systems with Abrupt Changes of the Noise Covariances Using Variational Bayes Algorithm**. Tampere: Tampere University of Technology, Department of Mathematics, 2012. 4 p. (Tampereen teknillinen yliopisto. Matematiikan laitos. Tutkimusraportti).

Friedrich P, Huhtamäki J, Koskela-Huotari K, Karppinen K, Still K. **Facilitating active participation in web-based co-development**. In Proceedings of Innovation through Social Media, ISM 2012 workshop proceedings, December 3, 2012, Oslo, Norway. Trondheim, Norway: AKADEMIKA FORLAG. 2012. p. 16-23. (Innovation Through Social Media).

Paunonen L, Pohjolainen S. **Feedforward Output Regulation for Distributed Parameter Systems with Infinite-Dimensional Exosystems**. In Proceedings of the 51st IEEE Conference on Decision and Control, IEEE CDC 2012, December 10-13 2012, Maui, Hawaii, USA. Piscataway, NJ: IEEE. 2012. p. 1566-1571. (IEEE Conference on Decision and Control). <https://doi.org/10.1109/CDC.2012.6426567>

Muller P, Ali-Löytty S, Dashti M, Nurminen H, Piche R. **Gaussian mixture filter allowing negative weights and its application to positioning using signal strength measurements**. In Proceedings of WPNC 2012, 9th Workshop on Positioning, Navigation and Communication, March 15-16, 2012, Dresden, Germany. Piscataway, NJ: Institute of Electrical and Electronics Engineers IEEE. 2012. p. 71-76. (Workshop on Positioning, Navigation and Communication). <https://doi.org/10.1109/WPNC.2012.6268741>

Orelma H. **Harmonic Forms on Conformal Euclidean Manifolds: The Clifford Multivector Approach**. Advances in Applied Clifford Algebras. 2012;22(1):143-158. <https://doi.org/10.1007/s00006-011-0297-1>

Lucka F, Pursiainen S, Burger M, Wolters CH. **Hierarchical Bayesian inference for the EEG inverse problem using realistic FE head models: Depth localization and source separation for focal primary currents**. NeuroImage. 2012;61(4):1364-1382. <https://doi.org/10.1016/j.neuroimage.2012.04.017>

Eriksson S-L, Orelma H. **Hyperbolic laplace operator and the Weinstein equation in R3**. In Gürlebeck K, Lahmer T, Werner F, editors, Proceedings in the 19th International Conference on the Applications of Computer Science and Mathematics in Architecture and Civil Engineering, IKM 2012, July 4-6 2012, Weimar, Germany. Weimar, Germany: IKM. 2012. p. 15. (International conference on the applications of computer science and mathematics in architecture and civil engineering).

Kangas J, Miilumäki T, Pohjolainen S. **Mathematics Remedial Instruction with Math-Bridge e-learning system**. In Alpers B, Robinson C, Rodriguez G, Martin A, de la Villa A, editors, 16th SEFI MWG Seminar - Mathematical Education of Engineers, Salamanca, Spain, 28.-30.6.2012. Salamanca, Spain: Universidad de Salamanca. 2012. (SEFI MWG Seminar).

Sirola N, Ali-Löytty S, inventors. **Method of tracking a state of a mobile electronic device**. Pat. US 8213956 B2. 2012.

Chen L, Ali-Löytty S, Piche R, Wu L. **Mobile Tracking in Mixed Line-of-Sight/Non-Line-of-Sight Conditions: Algorithm and Theoretical Lower Bound**. WIRELESS PERSONAL COMMUNICATIONS. 2012;65(4):753-771. <https://doi.org/10.1007/s11277-011-0294-7>

Huhtamäki J, Still K, Isomursu M, Russell MG, Rubens N. **Networks of Growth: Case Young Innovative Companies in Finland**. In Vivas C, Lucas F, editors, Proceedings of the 7th European Conference on Innovation and Entrepreneurship, September 20-21, 2012, Santarem, Portugal. Reading, UK: Academic Publishing International Limited. 2012. (European Conference on Innovation and Entrepreneurship).

Turunen E, Tchikapa N, Lele C. **n-Fold implicative basic logic is Gödel logic**. Soft Computing. 2012;16(1):177-181. <https://doi.org/10.1007/s00500-011-0761-9>

Kaleva O. **Nonlinear iteration semigroups of fuzzy Cauchy problems**. Fuzzy Sets and Systems. 2012;209:104-110. <https://doi.org/10.1016/j.fss.2012.04.016>

Piche R. **On the Parametric Instability Caused by Step Size Variation in Runge-Kutta-Nyström Methods**. Unknown Publisher, 2012. 11 p. (arXiv).

Kaasalainen M, Lu X, Vänttinen A-V. **Optimal computation of brightness integrals parametrized on the unit sphere**. Astronomy and Astrophysics. 2012;539:7. A96. <https://doi.org/10.1051/0004-6361/201117982>

Martikainen S, Piche R, Ali-Löytty S. **Outlier-robust estimation of GPS satellite clock offsets**. In 2012 International Conference on Localization and GNSS ICL-GNSS, June 25-27, 2012, Starnberg, Germany. Piscataway, NJ: Institute of Electrical and Electronics Engineers IEEE. 2012. p. 5 pp. 12906184. (2012 International Conference on Localization and GNSS). <https://doi.org/10.1109/ICL-GNSS.2012.6253107>

Paunonen L, Pohjolainen S. **Output Regulation for General Infinite-Dimensional Exosystems**. In Proceedings of the 7th IFAC Symposium on Robust Control Design, Rocond 2012, 20-22 June 2012, Aalborg, Denmark. Laxenburg, Austria: International Federation of Automatic Control IFAC. 2012. p. 162-167. (IFAC Symposium on Robust Control Design).

<https://doi.org/10.3182/20120620-3-DK-2025.00113>

Still K, Huhtamäki J, Russell MG, Rubens N. **Paradigm shift in innovation indicators - from analog to digital**. In Proceedings of the 5th ISPIIM Innovation Forum, 9-12 December, 2012, Seoul, Korea. Manchester, UK: International Society for Professional Innovation Management ISPIIM. 2012. (ISPIIM Innovation Symposium).

Paunonen L, Pohjolainen S. **Periodic Output Regulation for Distributed Parameter Systems**. Mathematics of Control Signals and Systems. 2012;24(4):403-441. <https://doi.org/10.1007/s00498-012-0087-x>

Kondo M, Turunen E. **Prime filters on residuated lattices**. In 2012 IEEE 42nd International Symposium on Multiple-Valued Logic ISMVL, 14-16 May, 2012, Victoria, British Columbia, Canada. Piscataway, NJ: Institute of Electrical and Electronics Engineers IEEE. 2012. p. 89-91. (IEEE International Symposium on Multiple-Valued Logic). <https://doi.org/10.1109/ISMVL.2012.40>

Pursiainen S. **Raviart-Thomas-type sources adapted to applied EEG and MEG: Implementation and results**. Inverse Problems. 2012;28(6). 065013. <https://doi.org/10.1088/0266-5611/28/6/065013>

Dashti M, Ali-Löytty S, Wirola L, Muller P, Nurminen H, Piche R. **Robust Kalman filter for positioning with wireless BS coverage areas**. In Proceedings of WPNC 2012, 9th Workshop on Positioning, Navigation and Communication, March 15-16, 2012, Dresden, Germany. Piscataway, NJ: Institute of Electrical and Electronics Engineers IEEE. 2012. p. 83-88. (Workshop on Positioning, Navigation and Communication). <https://doi.org/10.1109/WPNC.2012.6268743>

Paunonen L. **Robustness of strongly and polynomially stable semigroups**. Journal of Functional Analysis. 2012;263(9):2555-2583. <https://doi.org/10.1016/j.jfa.2012.08.023>

Laakkonen P. **Robust regulation: From state-space to frequency domain**. In Niemistö A, editor, Digest of TISE Seminar 2012, Nokia, Finland, 14 June, 2012. TISE Publications. Tampere: Tampere Graduate School in Information Science and Engineering (TISE). Tampere University of Technology, University of Tampere. 2012. p. 135-140. (TISE Seminar).

Hämäläinen T, Pohjolainen S. **Robust Regulation of Distributed Parameter Systems with Infinite-Dimensional Exosystems**. In The 51st IEEE Conference on Decision and Control, IEEE CDC 2012, December 10-13 2012, Maui, Hawaii, USA. Piscataway, NJ: Institute of Electrical and Electronics Engineers IEEE. 2012. p. 3514-3519. (IEEE Conference on Decision and Control). <https://doi.org/10.1109/CDC.2012.6426076>

Carry B, Kaasalainen M, Merline WJ, Muller TG, Jorda L, Drummond JD et al. **Shape modeling technique KOALA validated by ESA Rosetta at (21) Lutetia**. Planetary and Space Science. 2012;66(1):200-212. <https://doi.org/10.1016/j.pss.2011.12.018>

Kaasalainen M, Viikinkoski M. **Shape reconstruction of irregular bodies with multiple complementary data sources**. Astronomy and Astrophysics. 2012;543:9. A97. <https://doi.org/10.1051/0004-6361/201219267>

Still K, Huhtamäki J, Russell MG, Koskela-Huotari K, Isomursu M, Pohjolainen S. **Sosiaalisesta mediasta dataa innovaatiotoiminnan ymmärtämiseen ja mittaamiseen**. Tekes, 2012. 7 p. (Tekes Policy Brief).

Hakala T, Kaleva O, Harlin A. **Stress-strain behavior of polyamide 6 staple fibers of punch-needled press felts under simulated wet-pressing conditions**. Journal of the Textile Institute. 2012;103(12):1280-1293. <https://doi.org/10.1080/00405000.2012.677566>

Järvenpää M, Turunen E. **Suomessa 2004-2008 sattuneiden tieliikenneonnettomuuksien analysointia GUHA-tiedonlouhintamenetelmällä**. Tampere: Tampereen teknillinen yliopisto. Matematiikan laitos, 2012. 32 p. (Tampereen teknillinen yliopisto. Matematiikan laitos. Tutkimusraportti).

Müller J (Author). **Surrogate Model Optimization Toolbox: Matlab central file exchange** 2012.

Disney M, Lewis P, Raunonen P. **Testing a New Vegetation Structure Retrieval Algorithm from Terrestrial Lidar Scanner Data Using 3D Models**. In Silvilaser 2012, 12th International Conference on LiDAR Applications for Assessing Forest Ecosystems, 16-19 September 2012, Vancouver, Canada. Vancouver, Canada: Silvilaser Vancouver 2012. 2012. p. 1-9. (Silvilaser).

Paunonen L. **The Infinite-Dimensional Sylvester Differential Equation and Periodic Output Regulation**. In Arendt W, Ball JA, Behrndt J, Förster K-H, Mehrmann V, Trunk C, editors, Spectral Theory, Mathematical System Theory, Evolution Equations, Differential and Difference Equations. 21st International Workshop on Operator Theory and Applications, Berlin, July 2010. Operator Theory: Advances and Applications.. Basel, Switzerland: Springer Basel. 2012. p. 515-531. (International Workshop on Operator Theory and Applications). https://doi.org/10.1007/978-3-0348-0297-0_31

Still K, Huhtamäki J, Russell MG, Rubens N. **Transforming Innovation Ecosystems Through Network Orchestration: Case EIT ICT Labs**. In Huizingh KRE, Conn S, Torkkeli M, Bitran I, editors, Proceedings of the XXIII ISPIM Conference. Action for Innovation: Innovating from Experience, Barcelona, Spain, 17-20 June 2012. Manchester, UK: International Society for Professional Innovation Management ISPIM. 2012. (International Society for Professional Innovation Conference).

Basole RC, Russell MG, Huhtamäki J, Rubens N. **Understanding Mobile Ecosystem Dynamics: a Data-Driven Approach**. In Mobile Business in Everyday life: users' routines versus provider's turbulence. Proceedings of the 11th International Conference on Mobile Business, ICMB 2012, June 21-22, 2012, Delft, Netherlands. Delft, The Netherlands: Delft University of Technology. 2012. p. 17-28. (International Conference on Mobile Business).

Müller J. **User Guide for Modularized Surrogate Model Toolbox**. Tampere: Tampere University of Technology, 2012. 28 p. (TUT DPub).

Raitoharju M, Fadjukoff T, Ali-Löytty S, Piche R. **Using unlocated fingerprints in generation of WLAN maps for indoor positioning**. In 2012 IEEE/ION Position Location and Navigation Symposium PLANS, 23-26 April 2012, Myrtle Beach, SC, USA. Piscataway, NJ: Institute of Electrical and Electronics Engineers IEEE. 2012. p. 576-583. 12863832. (IEEE/ION Position Location and Navigation Symposium). <https://doi.org/10.1109/PLANS.2012.6236930>

Paunonen L. **Output Regulation Theory for Linear Systems with Infinite-Dimensional and Periodic Exosystems**. Tampere: Tampere University of Technology, 2011. (Tampere University of Technology. Publication).

Kaasalainen S, Pyysalo U, Krooks A, Vain A, Kukko A, Hyypä J et al. **Absolute radiometric calibration of ALS intensity data: Effects on accuracy and target classification**. Sensors. 2011;11(11):10586-10602. <https://doi.org/10.3390/s111110586>

Orelma H, Sommen F. **A differential form approach to Dirac operators on surfaces**. In Sabadini I, Sommen F, editors, Hypercomplex Analysis and Applications. Trends in Mathematics. Basel: Birkhäuser. 2011. p. 213-232 https://doi.org/10.1007/978-3-0346-0246-4_15

Pylvänäinen T. **Advances in Augmented Reality Technologies**. Tampere: Tampere University of Technology, 2011. 183 p. (Tampere University of Technology. Publication).

Pesonen H. **A Framework for Bayesian Receiver Autonomous Integrity Monitoring in Urban Navigation**. Navigation. 2011;58(3):229-240.

Eriksson S-L, Orelma H. **A hyperbolic interpretation of Cauchy-type kernels in hyperbolic function theory in hypercomplex analysis**. In Sabadini I, Sommen F, editors, Hypercomplex Analysis and Applications. Trends in Mathematics. Basel: Birkhäuser. 2011. p. 43-59 https://doi.org/10.1007/978-3-0346-0246-4_4

Rubens N, Russell MG, Perez R, Huhtamäki J, Still K, Kaplan D et al. **Alumni Network Analysis**. In 2011 IEEE 2nd Global Engineering Education Conference EDUCON, 4-6 April 2011, Amman, Jordan. Piscataway, NJ: IEEE. 2011. p. 606-611. (IEEE Global Engineering Education Conference EDUCON). <https://doi.org/10.1109/EDUCON.2011.5773200>

Eriksson S-L, Orelma H. **A Mean-Value Theorem for Some Eigenfunctions of the Laplace -Beltrami Operator on the Upper-Half Space**. *Annales Academiae Scientiarum Fennicae-Mathematica*. 2011;36:101-110. <https://doi.org/10.5186/aasfm.2011.3606>

Sirola N, Ali-Löytty S, inventors. **A method of tracking a state of a mobile electronic device**. Pat. KR 101106276. 2011.

Huttunen V, Piche R. **A Monocular Camera Gyroscope**. Tampere: Tampereen teknillinen yliopisto, 2011. 16 p. (Tampereen teknillinen yliopisto. Matematiikan laitos. Tutkimusraportti).

Kaasalainen S, Jaakkola A, Kaasalainen M, Krooks A, Kukko A. **Analysis of Incidence Angle and Distance Effects on Terrestrial Laser Scanner Intensity: Search for Correction Methods**. *Remote Sensing*. 2011;3(10):2207-2221. <https://doi.org/10.3390/rs3102207>

Huhtamäki J, Russell MG, Still K, Rubens N. **A Network-Centric Snapshot of Value Co-Creation in Finnish Innovation Financing**. In Seppä M, Helander N, Ilvonen I, editors, EBRF 2010, Research Forum to Understand Business in Knowledge Society, September 15-17, 2010, Nokia, Finland. Nokia: GVL Finland. 2011. p. 1-15. (Research Forum to Understand Business in Knowledge Society EBRF).

Huhtamäki J, Russell MG, Still K, Rubens N. **A Network-Centric Snapshot of Value Co-Creation in Finnish Innovation Financing**. In McPhee C, Seppä M, Tanev S, editors, The Open Source Business Resource. Talent First Network. 2011. p. 13-21

Salonen J, Nykänen O, Ranta P, Nurmi J, Helminen M, Rokala M et al. **An implementation of a semantic, web-based virtual machine laboratory prototyping environment**. *Lecture Notes in Computer Science*. 2011;7032:221-236. https://doi.org/10.1007/978-3-642-25093-4_15

Argatov I, Rautakorpi P, Silvennoinen R. **Apparent wind load effects on the tether of a kite power generator**. *Journal of Wind Engineering and Industrial Aerodynamics*. 2011;99(10):1079-1088. <https://doi.org/10.1016/j.jweia.2011.07.010>

Raumonen P, Kaasalainen S, Kaasalainen M, Kaartinen H. **Approximation of Volume and Branch Size Distribution of Trees from Laser Scanner Data**. In *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, ISPRS Workshop Laser Scanning, 2011, 29.-31.8.2011, Calgary, Canada*. Calgary: ISPRS. 2011. p. 1-6. (ISPRS Workshop Laser Scanning).

Hämäläinen T, Pohjolainen S. **A Self-Tuning Robust Regulator for Infinite-Dimensional Systems**. *IEEE Transactions on Automatic Control*. 2011;56(9):2116-2127. <https://doi.org/10.1109/TAC.2011.2129310>

Seppänen M. **Autonomous satellite orbit prediction**. In Niemistö A, editor, Digest of TISE Seminar 2011. TISE publications. Tampere: Tampere Graduate School in Information Science and Engineering (TISE). Tampere University of Technology. 2011. p. 5-10. (TISE Seminar).

Seppänen M, Perälä T, Piche R. **Autonomous satellite orbit prediction**. In *Proceedings of The Institute of Navigation 2011 International Technical Meeting, January 24-26, 2011, San Diego, CA, USA*. San Diego, CA: The Institute of Navigation. 2011. p. 554-564. (Institute of Navigation International Technical Meeting).

Turunen E. **Axiomatic Extensions of Höhle's Monoidal Logic**. In *Proceedings of the 7th conference of the European Society for Fuzzy Logic and Technology EUSFLAT-LFA 2011, Aix-Les-Bains, France, 18 - 22 July 2011*. Amsterdam: Atlantis Press. 2011. p. 163-168. (Conference of the European Society for Fuzzy Logic and Technology EUSFLAT-LFA).

Pesonen H, Piche R. **Bayesian Positioning Using Gaussian Mixture Models with Time-varying Component Weights**. In *JSM 2011 Joint Statistical Meetings 2011, Miami Beach, Florida, USA, July 30-August 4, 2011*. Miami Beach, FL: American Statistical Association. 2011. p. 4516-4524. (Joint Statistical Meetings JSM).

Huhtamäki J, Russell MG, Still K, Rubens N, Yu JC. **Business Angels and Investment Organizations as Networked Co-creators of the Finnish Innovation Ecosystem.** In Proceedings of the Triple Helix IX International Conference: Silicon Valley: Global Model or Unique Anomaly? 11-14 July, 2011, Stanford, California, USA. Stanford, CA: Stanford University, H-STAR Institute Center for Innovation and Communication. 2011. p. 1-15. (Triple Helix International Conference).

Durech J, Kaasalainen M, Herald D, Dunham D, Timerson B, Hanus J et al. **Combining asteroid models derived by lightcurve inversion with asteroidal occultation silhouettes.** *Icarus*. 2011;214(2):652-670. <https://doi.org/10.1016/j.icarus.2011.03.016>

Tladlec J, Turunen E. **Commutative bounded integral residuated orthomodular lattices are Boolean algebras.** *Soft Computing*. 2011;15(4):635-636. <https://doi.org/10.1007/s00500-010-0572-4>

Intosalmi J, Manninen T, Ruohonen K, Linne M-L. **Computational study of noise in a large signal transduction network.** *BMC Bioinformatics*. 2011;12:1-8. 252. <https://doi.org/10.1186/1471-2105-12-252>

Raumonen P, Suuriniemi S, Kettunen L. **Dimensional Reduction of Electromagnetic Boundary Value Problems.** *Boundary Value Problems*. 2011;2011:1-25. 9. <https://doi.org/10.1186/1687-2770-2011-9>

Laakkonen P, Pohjolainen S. **Directed structure at infinity for infinite-dimensional systems.** *International Journal of Control*. 2011;84(4):702-715. <https://doi.org/10.1080/00207179.2011.572999>

Farago I, Horvath R, Korotov S. **Discrete maximum principles for FE solutions of nonstationary diffusion-reaction problems with mixed boundary conditions.** *Numerical Methods for Partial Differential Equations*. 2011;27(3):702-720. <https://doi.org/10.1002/num.20547>

Still K, Russell MG, Huhtamäki J, Turpeinen M, Rubens N. **Explaining innovation with indicators of mobility and networks: Insights into central innovation nodes in Europe.** In Proceedings of the Triple Helix IX International Conference: Silicon Valley: Global Model or Unique Anomaly? 11-14 July, 2011, Stanford, California, USA. Stanford, CA: Stanford University, H-STAR Institute Center for Innovation and Communication. 2011. p. 1-17. (Triple Helix International Conference).

Kanniainen J, Mäkinen S, Piche R, Chakrabarti A. **Forecasting the diffusion of innovation: A stochastic bass model with log-normal and mean-reverting error process.** *IEEE Transactions on Engineering Management*. 2011;99:1-22. <https://doi.org/10.1109/TEM.2010.2048912>

Still K, Russell MG, Huhtamäki J, Yu JC, Rubens N. **Gender and Innovation: Networks of Executive Women in Technology-Based Companies.** In Proceedings of the Triple Helix IX International Conference: Silicon Valley: Global Model or Unique Anomaly? 11-14 July, 2011, Stanford, California, USA. Stanford, CA: Stanford University, H-STAR Institute Center for Innovation and Communication. 2011. p. 1-20. (Triple Helix International Conference).

Sierks H, Lamy P, Barbieri C, Koschny D, Rickman H, Rodrigo R et al. **Images of asteroid 21 Lutetia: A remnant planetesimal from the early solar system.** *Science*. 2011;334(6055):487-490. <https://doi.org/10.1126/science.1207325>

Mäki-Marttunen T, Acimovic J, Nykter M, Kesseli J, Ruohonen K, Yli-Harja O et al. **Information Diversity in Structure and Dynamics of Simulated Neuronal Networks.** *Frontiers in Computational Neuroscience*. 2011;5:1-17. 26. <https://doi.org/10.3389/fncom.2011.00026>

Foldes S, Szigeti J, van Wyk L. **Invertibility and Dedekind finiteness in structural matrix rings.** *Linear and Multilinear Algebra*. 2011;59(2):221-227. <https://doi.org/10.1080/03081080903357653>

Silius K, Pohjolainen S, Miilumäki T, Kangas J, Joutsenlahti J. **Korkeakoulumatematiikka teekkarin kompastuskivenä?** In Mäkinen M, Korhonen V, Annala J, Kalli P, Svärd P, Värri V-M, editors, *Korkeajännityksiä - kohti osallisuutta luovaa korkeakoulutusta*. Tampere: Tampere University Press. 2011. p. 242-265

Väljataga T. **Learner Control and Responsibility: Expanding the Concept of Self-direction in Higher Education**. Tampere: Tampere University of Technology, 2011. 167 p. (Tampere University of Technology. Publication).

Pohjolainen S, Nortunen H. **Linear Equation Solvers: Comparison of LU Decomposition and a Robust ODE Solver**. In Repin S, Tiihonen T, Tuovinen T, editors, Proceedings of CAO2011 ECCOMAS Thematic Conference on Computational Analysis and Optimization, Jyväskylä, Finland, 9.6.-11.6.2011. Reports of the Department of Mathematical Information Technology. Series A Collections. Jyväskylä: University of Jyväskylä. 2011. p. 77-80. (CAO ECCOMAS Thematic Conference on Computational Analysis and Optimization; 1/2011).

Eriksson S-L. **Maaliskuun puheenaihe: Mielenkiintoista matematiikkaa opetukseen LUMA-sanomat**. LUMA-sanomat. 2011;(Maaliskuu):1-3.

Kangas J. **Matematiikkaklinikka**. In Myller E, editor, Oppaiden opas - vinkkejä opetukseen opintopolun eri vaiheissa. Aalto-yliopiston julkaisusarja Tiede + Teknologia. Helsinki: Aalto-yliopisto. 2011. p. 56-60

Miilumäki T, Pohjolainen S, Silius K, Nykänen O, Kangas J. **Math-Bridge - Eurooppalainen silta lukio- ja korkeakoulumatematiikan välille**. In Leinamo S, Salo H, editors, ITK 2011, Interaktiivinen Tekniikka Koulutuksessa - konferenssi 2011 - Uutuuden viehätystä, ideoiden kierrätystä, Hämeenlinna, 6.-8.4.2011. Hämeen kesäyliopiston julkaisuja. Sarja B. Hämeenlinna: Hämeen kesäyliopisto. 2011. p. 70-71. (ITK Interaktiivinen Tekniikka Koulutuksessa - konferenssi).

Eriksson S-L, Orelma H. **Mean value properties for K-hypermonogenic functions**. In Gurlebeck K, editor, 9th International Conference on Clifford Algebras and their Applications in Mathematical Physics 15 - 20 July 2011, Weimar, Germany. Weimar: ICCA9. 2011. p. 1-11. (International Conference on Clifford Algebras and their Applications in Mathematical Physics).

Kailanto M. **Miten opiskella matematiikkaa yliopistossa - opas opiskelijoille**. In Myller E, editor, Oppaiden opas - vinkkejä opetukseen opintopolun eri vaiheissa. Aalto-yliopiston julkaisusarja Tiede + Teknologia. Helsinki: Aalto-yliopisto. 2011. p. 53-55

Muller J, Piche R. **Mixture surrogate models based on Dempster-Shafer theory for global optimization problems**. Journal of Global Optimization. 2011;51(1):79-104. <https://doi.org/10.1007/s10898-010-9620-y>

Liang C, Ali-Löytty S, Piche R, Lenan W. **Mobile Tracking in Mixed Line-of-sight/Non-line-of-sight Conditions: Algorithms and Theoretical Lower Bound. Chapter 21**. In Zekavat R, Buehrer RM, editors, Handbook of Position Location: Theory, Practice and Advances. Hoboken, NJ: WILEY-IEEE PRESS. 2011. p. 685-708

Acimovic J, Mäki-Marttunen T, Havela R, Teppola H, Linne M-L. **Modeling of Neuronal Growth In Vitro: Comparison of Simulation Tools NETMORPH and CX3D**. Eurasip Journal on Bioinformatics and Systems Biology. 2011;2011:1-13. 616382. <https://doi.org/10.1155/2011/616382>

Virkki J, Sydänheimo L, Raunonen P. **Modifications of the 85/85 test and the temperature cycling test for tantalum capacitors**. Soldering and Surface Mount Technology. 2011;23(3):168-176. <https://doi.org/10.1108/09540911111146926>

Huttunen H, Valkama M, Talvitie J, Laaksonen M. **Motivating the Mathematics Studies by Real-life Examples of Signal Processing and Communications Engineering**. In 2011 IEEE Digital Signal Processing Workshop and IEEE Signal Processing Education Workshop (DSP/SPE), Sedona, USA, 4-7 January 2011. Piscataway, NJ: IEEE. 2011. p. 1-6. (IEEE Digital Signal Processing Workshop and IEEE Signal Processing Education Workshop DSP/SPE). <https://doi.org/10.1109/DSP-SPE.2011.5739213>

Kaasalainen M. **Multimodal inverse problems: maximum compatibility estimate and shape reconstruction**. Inverse Problems and Imaging. 2011;5(1):37-57. <https://doi.org/10.3934/ipi.2011.5.37>

Turunen E. **Non-classical Logics with Real Life Applications**. In Proceedings of International Conference of Rough Sets, Fuzzy Sets and Soft Computing ICRSFSSC-2009, November 5-7 2009, Tripura University. New Delhi: Serial Publications. 2011. p. 171-178. (International Conference of Rough Sets, Fuzzy Sets and Soft Computing ICRSFSSC).

Kaarakka T, Salminen P. **On Fractional Ornstein-Uhlenbeck Process**. Communications on Stochastic Analysis. 2011;5(1):121-133.

Major L. **On the distribution of coefficients of powers of positive polynomials**. Australasian Journal of Combinatorics. 2011;49:239-243.

Paunonen L. **Perturbation of strongly and polynomially stable Riesz-spectral operators**. Systems and Control Letters. 2011;60(4):234-248. <https://doi.org/10.1016/j.sysconle.2011.01.005>

Laakkonen P. **Plotting root-locus of infinite-dimensional systems**. In Repin S, Tiihonen T, Tuovinen T, editors, Proceedings of CAO2011 ECCOMAS Thematic Conference on Computational Analysis and Optimization, Jyväskylä, Finland, 9.6.-11.6.2011. Reports of the Department of Mathematical Information Technology. Series A Collections. Jyväskylä: University of Jyväskylä. 2011. p. 139-142. (CAO ECCOMAS Thematic Conference on Computational Analysis and Optimization; 1/2011).

Kanniainen J, Ruohonen K. **Properties of duration drift**. International Journal of Economics and Business Research. 2011;3(2):176-191.

Kortemaa A (Author), Moisio M (Author), Punkki J (Author), Palonen T (Author), Ranta P (Author), Leino T (Author) et al. **Puuvirta-virtuaalinen ja simuloitu oppimisympäristö 2011**.

Machaj J, Brida P, Piche R. **Rank Based Fingerprinting Algorithm for Indoor Positioning**. In 2011 International Conference on Indoor Positioning and Indoor Navigation IPIN, 21-23 September 2011, Guimarães, Portugal. Piscataway, NJ: IEEE. 2011. p. 1-6. (International Conference on Indoor Positioning and Indoor Navigation IPIN). <https://doi.org/10.1109/IPIN.2011.6071929>

Piche R. **Robust estimation of a reception region from location fingerprints**. In 2011 International Conference on Localization and GNSS ICL-GNSS June 29-30, 2011 Tampere, Finland. Piscataway, NJ: IEEE. 2011. p. 31-35. (International Conference on Localization and GNSS ICL-GNSS). <https://doi.org/10.1109/ICL-GNSS.2011.5955261>

Paunonen L. **Robust output regulation and the internal model principle**. In Niemistö A, editor, Digest of TISE Seminar 2011. TISE publications. Tampere: Tampere Graduate School in Information Science and Engineering (TISE). Tampere University of Technology. 2011. p. 71-75. (TISE Seminar).

Yu JC, Russell MG, Still K, Rubens N, Huhtamäki J, Pöschko J. **Social Media, Reputation And Branding Of Innovation Hubs: A Periscope Using Content Analysis Of Twitter**. In Proceedings of the Triple Helix IX International Conference: Silicon Valley: Global Model or Unique Anomaly? 11-14 July, 2011, Stanford, California, USA. Stanford, CA: Stanford University, H-STAR Institute Center for Innovation and Communication. 2011. p. 1-20. (Triple Helix International Conference).

Still K, Isomursu M, Koskela-Huotari K, Huhtamäki J. **Social media-supported indicators for user-driven service innovation**. In Proceedings of VTT Symposium on Service Innovation, August 18, 2011, Espoo, Finland. VTT Symposium. Espoo: VTT Technical Research Centre of Finland. 2011. p. 208-217. (VTT Symposium on Service Innovation).

Foldes S, Meletiou G. **Some remarks on structural matrix rings and matrices with ideal entries**. Miskolc Mathematical Notes. 2011;12(1):25-29.

Intosalmi J, Manninen T, Ruohonen K, Linne M-L. **Studying the quality of noise in a large biochemical reaction network as a function of the system volume**. In The International Conference on Applied Mathematics, Modeling and Computational Science, AMMCS 2011, 25 - 29 July, Waterloo, Ontario, Canada. Waterloo, Ontario, Canada: AMMCS 2011. 2011. p. 409.

(International Conference on Applied Mathematics, Modeling and Computational Science AMMCS).

Lamminen J, Forsvik HJ, Voipio V, Ruohonen K. **Teleconsultation: Changes in technology and costs over a 12-year period**. Journal of Telemedicine and Telecare. 2011;17(8):412-416. <https://doi.org/10.1258/jtt.2011.110211>

Laakkonen P. **The root-locus analysis: An outline**. In Niemistö A, editor, TISE Seminar 2011, Tampere, 25.5.2011. Digest of TISE Seminar 2011. Tampere: Tampere Graduate School in Information Science and Engineering (TISE). Tampere University of Technology. 2011. p. 1-4. (TISE Seminar).

Russell MG, Still K, Huhtamäki J, Yu JC, Rubens N. **Transforming Innovation Ecosystems through Shared Vision and Network Orchestration**. In Proceedings of the Triple Helix IX International Conference: Silicon Valley: Global Model or Unique Anomaly? 11-14 July, 2011, Stanford, California, USA. Stanford, CA: Stanford University, H-STAR Institute Center for Innovation and Communication. 2011. p. 1-21. (Triple Helix International Conference).

Markkula M, Rokala M, Palonen T, Alarotu V, Helminen M, Koskinen KT et al. **Utilization of the hydraulic engineering design information for semi-automatic simulation model generation**. In Sairala H, Koskinen KT, editors, The Twelfth Scandinavian International Conference on Fluid Power, SICFP'11, May 18-20, 2011, Tampere, Finland. Tampere: Scandinavian International Conference on Fluid Power. 2011. p. 443-458. (Scandinavian International Conference on Fluid Power SICFP; 3).

Helminen M, Palonen T, Rokala M, Ranta P, Mäkelä T, Koskinen KT. **Virtual machine laboratory based on m1-technology**. In The Twelfth Scandinavian International Conference on Fluid Power, SICFP'11, May 18-20, 2011, Tampere, Finland. Tampere: Scandinavian International Conference on Fluid Power. 2011. p. 321-334. (Scandinavian International Conference on Fluid Power SICFP).

Turunen E (Author). **VRTUOSI: Courses Data Mining and Many-valued Similarities: Universidad Rey Juan Carlos** 2011.

Silius K, Pohjolainen S, Kangas J, Miilumäki T, Joutsenlahti J. **What can be done to bridge the competency gap between upper-secondary school and university mathematics?** In 2011 IEEE Global Engineering Education Conference EDUCON, 4-6 April 2011, Amman, Jordania. Piscataway, NJ: IEEE. 2011. p. 428-436. (IEEE Global Engineering Education Conference EDUCON). <https://doi.org/10.1109/EDUCON.2011.5773172>

Orelma H. **New perspectives in hyperbolic function theory**. Tampere: Tampere University of Technology, 2010. 37 p. (Tampere University of Technology. Publication).

Eriksson S-L, Orelma H. **A hyperbolic interpretation of Cauchy type kernels in hyperbolic function theory**. Tampere: Unknown Publisher, 2010. (Tampereen teknillinen yliopisto. Matematiikan laitos. Tutkimusraportti).

Pohjolainen S, Suutala A. **Akustinen mallinnus**. In Pohjolainen S, editor, Matemaattinen mallinnus. Helsinki: WSOYpro. 2010. p. 238-259

Sirola N, Rouhe J. **A motion model for articulated vehicles and a distributed acceleration measurement system**. In Proceedings of the 7th Workshop on Positioning, Navigation and Communication 2010 WPNC'10, 11-12 March 2010, Dresden, Germany. 2010. p. 164-167 <https://doi.org/10.1109/WPNC.2010.5650556>

Muller J. **Approximative solutions to the bicriterion Vehicle Routing Problem with Time Windows**. European Journal of Operational Research. 2010;202(1):223-231. <https://doi.org/10.1016/j.ejor.2009.04.029>

Piche R, Turunen E. **Bayesian assaying of GUHA nuggets**. In Hüllermeier E, Kruse R, Hoffmann F, editors, Information Processing and Management of Uncertainty in Knowledge-Based Systems. Theory and Methods, 13th International Conference, IPMU 2010, Dortmund, Germany, June 28 - July 2, 2010. Communications in Computer and Information Science. 2010. p. 348-355 https://doi.org/10.1007/978-3-642-14055-6_36

Penttinen A, Piche R. **Bayesian Methods**. Tampere: Tampere University of Technology, 2010. 82 p.

Ali-Löytty S. **Box Gaussian mixture filter**. IEEE Transactions on Automatic Control. 2010;55(9):2165-2169.
<https://doi.org/10.1109/TAC.2010.2051486>

Laakkonen P. **Briefly about the root-locus of linear systems**. In Koivisto P, editor, Digest of TISE Seminar 2010, Ylöjärvi, Finland, 26.5.2010. TISE Publications. 2010. p. 101-106

Lehtonen E. **Closed classes of functions, generalized constraints, and clusters**. Algebra Universalis. 2010;63(2-3):203-234. <https://doi.org/10.1007/s00012-010-0071-6>

Sirola N. **Closed-form algorithms in mobile positioning: Myths and misconceptions**. In Proceedings of the 7th Workshop on Positioning, Navigation and Communication 2010 WPNC'10, 11-12 March 2010, Dresden, Germany. 2010. p. 38-44
<https://doi.org/10.1109/WPNC.2010.5653789>

Foldes S, Lehtonen E. **Column-partitioned matrices over rings without invertible transversal submatrices**. Ars Combinatoria. 2010;97:33-39.

Intosalmi J, Manninen T, Ruohonen K, Linne M-L. **Comparing two stochastic differential equation models for protein kinase C activation pathway**. In Abstracts of Papers, Posters and Talks presented at the 2010 Joint RECOMB Satellite Conference on Systems Biology - Regulatory Genomics - DREAM5, New York, USA, 16-20 November 2010. 2010. p. 139

Väljataga T, Pata K, Tammets K. **Considering learners' perspectives to personal learning environments in course design**. In Lee MJW, editor, WEB 2.0 Based E-Learning: Applying Social Informatics for Tertiary Teaching. Hershey: IGI Global. 2010. p. 85-108

Huhtamäki J, Salonen J, Marttila J, Nykänen O. **Context-Driven Social Network Visualisation: Case Wiki Co-Creation**. In Karabeg D, Park J, editors, Proceedings of the Knowledge Federation 2010: Self-Organizing Collective Mind, October 3-6, 2010, Dubrovnik, Croatia. 2010. p. 1-13