

CONTINUATION OF LIST OF PUBLICATIONS

Ferenc Schipp

The first part of the list of publications is published in *Annales Univ. Sci. Budapest., Sect. Comp.*, **33** (2010) 9–19.

- [151] Discrete orthogonality of Zernike functions and its application to corneal measurements, *Electronic engineering and computing technology*, Lecture notes in electrical engineering **60**, Springer, Dordrecht, 2010, (eds: Ao, Sio-long, Gelman, Len), pp. 455–469. (with Z. Fazekas, M. Pap and A. Soumelidis)
- [152] Rational function systems in ECG processing, *Computer Aided System Theory-EUROCAST 2011, 13th International Conference Las Palmas de Gran Canaria*, Spain, February 2011, Revised Selected Papers, Part I, Springer LNCS 6927, pp. 88–95. (with S. Fridli and L. Lócsi)
- [153] Reminiscences of the Early Work in Walsh Function. Interviews with F. Pichler, W. R. Wade and F. Schipp, *Tampere International Center for Signal Processing, Tampere, Finland, TICSP Series*, **58** (2011), pp. 1–105 (Eds. R.S. Stankovic and J. T. Astola).
- [154] Biorthogonal systems to rational functions, *Annales Univ. Sci. Budapest., Sect. Comp.*, **35** (2011), 95–105. (with S. Fridli)
- [155] On the Fourier coefficients with respect to the discrete Laguerre system, *Annales Univ. Sci. Budapest., Sect. Comp.*, **34** (2011), 223–233. (with A. Soumelidis)
- [156] Generic Zernike-based surface representation of measured corneal surface data, *2011 IEEE International Symposium on Medical Measurements and Applications*, MeMeA May 30–31, 2011, Bari, Italy, Proceedings, ISBN:978-1-4244-9337-1, pp. 148–153. (with A. Soumelidis, Z. Fazekas and M. Pap)
- [157] Pole reconstruction of systems from Laguerre basis representations, *15th WSEAS CSCC Multiconference, Int. Conf. of SYSTEMS*, Corfu Island, Greece, July 14–17, 2011, pp. 172–179. (with J. Bokor and A. Soumelidis)

- [158] Pole structure estimation from Laguerre representation using hyperbolic metric on the unite disc, *50th IEEE Conference on Decision and Control an European Control Conference*, Orlando, Florida, December 12–15, 2011, pp. 2136–2141. (with J. Bokor and A. Soumelidis)
- [159] On hyperbolic wavelets, *18th IFAC World Congress*, Milan, Italy, August 28 – September 2, 2011 pp. 2309–2314 (with J. Bokor and A. Soumelidis)
- [160] Identifying harmonics in mechanical systems by using hyperbolic wavelet constructs, *Mechanical Engineering Letters, Szent István University*, **6** (2011), 20–38.
- [161] Rational modeling of multi-lead QRS complexes in ECG signals, *Annales Univ. Sci. Budapest., Sect. Comp.*, **37** (2012), 145–155. (with S. Fridli, P. Kovács and L. Lócsi)
- [162] Eigenvalues of matrices and discrete Laguerre–Fourier coefficients, *Mathematica Pannonica*, **23/1** (2012), 147–157. (with A. Soumelidis)
- [163] Modeling and identification in frequency domain representations on the Blaschke group, *Proceedings of the IASTED International Conference Control and Applications (CA 2012)*, Crete, Greece, June 18–20, 2012, pp. 161–168. (with J. Bokor and A. Soumelidis)
- [164] Applying hyperbolic wavelets in frequency domain identification, *Int. Conference in Control Automation and Robotics, ICINCO 2012*, July 28–30, 2012, Rome, Italy, pp. 532–535. (with J. Bokor and A. Soumelidis)
- [165] Comparison of the corneal surface representation based on Chebyshev polynomials, *MeMeA 2012 IEEE Symposium on Medical Measurements and Applications*, May 18–19, 2012, Budapest, Hungary, Proceedings, pp. 76–81. (with Z. Fazekas and A. Soumelidis)
- [166] Identifying poles from time-domain data using discrete Laguerre system, *20th Mediterranean Conference on Control and Automation 2012*, Barcelona, July 3–6, 2012. (with J. Bokor and A. Soumelidis)
- [167] Rational orthogonal system on the plane, *Annales Univ. Sci. Budapest., Sect. Comp.*, **39** (2013), 63–77 (with S. Fridli and Z. Gilián)
- [168] An iterative identification of pole-structure in dynamic system based on hyperbolic metric and Malmquist–Takenaka representation, *52th IEEE Conference on Decision and Control*, 2013. (with J. Bokor and A. Soumelidis)

- [169] Realizing system poles identification on the unit disc based on Laguerre representations and hyperbolic metric, *21st Mediterranean Conference on Control and Automation (MED)*, Platinias-Chania, Crete, Greece, June 25–28, 2013, pp. 1208–1213 (with J. Bokor and A. Soumelidis)
- [170] Rational Hermite–Fejér interpolation, *Annales Univ. Sci. Budapest., Sect. Comp.*, **40** (2013), 233–244. (with S. Fridli and Z. Gilián)
- [171] Hyperbolic wavelets, *Topics in Mathematical Analysis and Application*, Springer Optimization and Applications **94**, (Eds. T.M. Rassias, L. Tóth), Springer, 2014, pp. 633–658, ISBN 978-3-319-06553-3.
- [172] Hyperbolic wavelets (Hungarian), *Alkalmazott Matematikai Lapok*, **32** (2015), 1–39.
- [173] Dyadic Walsh analysis from 1924, *Atlantis Studies in Mathematics for Engineering and Science*, Paris, Atlantic Press, (2015) Volume 1, pp. 455, Volume 2, pp. 360 (editor with R.S. Stankovic, P.L. Butzer, W.R. Wade).
- [174] Dyadic derivative, summation, approximation, in [173], Vol 1. 209–223. (with S. Fridli.)
- [175] How I started my research in Walsh and Dyadic Analysis, in [173], 235–237.
- [176] Equilibrium conditions for the Malmquist–Takenaka systems, *Acta Sci. Math. (Szeged)*, **85** (2015), 469–482. (with M. Pap)
- [177] Coupled oscillations – In memory of Lajos Skrapits (Hungarian), *Fizikai Szemle*, **6** (2016), 205–209. <http://fizikaiszemle.hu>
- [178] *Rational Orthogonal Systems* (Hungarian), 2016, pp. 129. [ELTE Faculty of Informatics, Faculty Digital Library](#),
- [179] Wavelets – About the work of Yves Meyer, winner of the 2017 Abel Prize (Hungarian), *Érintő, Elektronikus Matematikai Lapok*, 6. szám, 2017 december, www.ematlap.hu.
- [180] Science, Education, Applications in IT training, ELTE Faculty of Informatics, *Neumann Day*, April 27, 2017.
- [181] Rational Zernike functions. *Annales Univ. Sci. Budapest., Sect. Comp.*, **46** (2017), 177–190. (with L. Lócsi)
- [182] The hyperbolic wavelet transform and its generalization, Delhi 2017 dec. 14–17. (with M. Pap.)

- [183] Hyperbolic geometrical approach to model reduction, *Preprints of the 20th World Congress, The International Federation of Automatic Control Toulouse*, France, July 9–14, 2017, 13447–13452, IFAC PAPERS ONLINE **50(1)** pp. 12905–12910, ISBN 2405-8963. (with A. Soumelidis, J. Bokor, Z. Szabó)
- [184] Rational Zernike functions capture the rotations of the eye-balls. *ECMI 2018 Proceedings*, (with Z. Fazekas, L. Lócsi, A. Soumelidis, Zs. Németh)
- [185] Geometric interpretation of QRS complexes in ECG signals by rational functions, *Annales Univ. Sci. Budapest., Sect. Comp.*, **47** (2018), 155–166. (with G. Bognár)
- [186] Quaternionic Blaschke group, *MDPI Mathematics*, **7, 33** (2019), 1–12. (with M. Pap)
- [187] Discrete orthogonality of Zernike–Blaschke functions, *SIAM Journal of Numerical Analysis*, to appear. (with Zs. Németh).