

# Departmental List of Publications for the Calendar Year 2019

- Amor N., Rasool G., Bouaynaya N. and Shterenberg R., “Constrained Particle Filtering for Movement Identification in Forearm Prosthesis”, *IEEE Signal Processing*, 2019.
- A. Blokh, M. Misiurewicz, Forcing among patterns with no block structure, *Topology Proceedings*, vol. 54 (2019), 125—137.
- A. Blokh, L. Oversteegen, R. Ptacek, V. Timorin, Models for spaces of dendritic polynomials, *Trans. Amer. Math. Soc.*, Vol. 372 (2019), 4829—4849.
- A. Blokh, M. Misiurewicz, Renormalization towers and their Forcing, *Trans. Amer. Math. Soc.*, Vol. 372 (2019), 8933–8953.
- K. Campbell, M. Nguyen and R. Weikard, "On the spectral theory for first-order systems without the unique continuation property", *Linear and Multilinear Algebra*, published online: 04. Oct 2019
- Ditzler G., Bouaynaya N., Shterenberg R., and Fathallah-Shaykh H., “Approximate Kernel Reconstruction for Time-Varying Networks”, *BioData Mining*, 2019.
- A. Ghatasheh, R. Weikard, "Spectral Theory for Systems of Ordinary Differential Equations with Distributional Coefficients", *J. Differential Equations*, available online 26. September 2019.
- F. Gesztesy, S. Naboko, R. Weikard and M. Zinchenko, "Donoghue-Type  $m$ -Functions for Schrödinger Operators with Operator-Valued Potentials", *J. Anal. Math.*, vol. 137, no. 1, 2019, pp. 373–427.
- Penfei Guan, Junfang Li and Mu-Tao Wang, A volume preserving flow and the isoperimetric problem in warped product spaces, *Transactions of AMS*, Vol. 372, (2019), 2777-2798.
- Yu. Karpeshina, R. Shterenberg "Extended States for the Schrodinger Operator with Quasi-periodic Potential in Dimension Two”, *Memoirs of AMS*, 238, 1239, (2019), 139 pp.
- Junfang Li and Chao Xia, An integral formula and its applications on sub-static manifolds, (with Chao Xia), *Journal of Differential Geometry*, (2019) Volume 27, Issue 3, pp 2539–2556.

Caleb C. Moxley and Nandor Simanyi, Homotopical complexity of a billiard flow on the 3D flat torus with two cylindrical obstacles, *Ergodic Theory and Dynamical Systems*, Vol. 39, No. 4, April 2019, pp. 1071-1081.

Parnowski L., Shterenberg R., “Perturbation Theory for Almost-Periodic Potentials I. One-dimensional case”, *CMP*, 2019.

Simanyi N. Further Developments of Sinai’s Ideas: The Boltzmann Sinai Hypothesis. In: Holden H., Piene R. (Eds) The Abel Prize 2013-2017. *The Abel Prize*. Springer, 2019.

Zeng, Yanni  $L^p$  time asymptotic decay for general hyperbolic-parabolic balance laws with applications. *J. Hyperbolic Differ. Equ.* 16 (2019), no. 4, 663–700

Yanni Zeng and Kun Zhao, On the logarithmic Keller-Segel-Fisher/KPP system, *Discrete Contin. Dyn. Syst.*, 39(9) (2019), pp 5365-5402