Departmental List of Publications for the Year 2016

[1] Houssam Abdul-Rahman, Bruno Nachtergaele, Robert Sims, and Günter Stolz. Entanglement dynamics of disordered quantum XY chains. *Lett. Math. Phys.*, 106(5):649–674, 2016.

[2] C. Bennewitz, B. M. Brown, and R. Weikard. The spectral problem for the dispersionless Camassa-Holm equation. In *Operator theory, function spaces, and applications*, volume 255 of *Oper. Theory Adv. Appl.*, pages 67–90. Birkhäuser/Springer, Cham, 2016.

[3] Alexander Blokh, Doug Childers, Genadi Levin, Lex Oversteegen, and Dierk Schleicher. An extended Fatou-Shishikura inequality and wandering branch continua for polynomials. *Adv. Math.*, 288:1121–1174, 2016.

[4] Alexander Blokh, Lex Oversteegen, Ross Ptacek, and Vladlen Timorin. The combinatorial Mandelbrot set as the quotient of the space of geolaminations. In *Dynamics and numbers*, volume 669 of *Contemp. Math.*, pages 37–62. Amer. Math. Soc., Providence, RI, 2016.

[5] Alexander Blokh, Lex Oversteegen, Ross Ptacek, and Vladlen Timorin. Laminations from the main cubioid. *Discrete Contin. Dyn. Syst.*, 36(9):4665–4702, 2016.

[6] Alexander Blokh, Lex Oversteegen, Ross Ptacek, and Vladlen Timorin. Quadratic-like dynamics of cubic polynomials. *Comm. Math. Phys.*, 341(3):733–749, 2016.

[7] Matthew P. Clay and Nándor J. Simányi. Rényi's parking problem revisited. *Stoch. Dyn.*, 16(2):1660006, 11, 2016.

[8] David J. Cosper, Jeffrey K. Houghton, John C. Mayer, Luka Mernik, and Joseph W. Olson. Central strips of sibling leaves in laminations of the unit disk. *Topology Proc.*, 48:69–100, 2016.

[9] Nicholas Crawford, Stephen Ng, and Shannon Starr. Emptiness formation probability. *Comm. Math. Phys.*, 345(3):881–922, 2016.

[10] Dimah Dera, Nidhal Bouaynaya, and Hassan M. Fathallah-Shaykh. Automated robust image segmentation: level set method using nonnegative matrix factorization with application to brain MRI. *Bull. Math. Biol.*, 78(7):1450–1476, 2016.

[11] Richard Froese, Darrick Lee, Christian Sadel, Wolfgang Spitzer, and Günter Stolz. Localization for transversally periodic random potentials on binary trees. *J. Spectr. Theory*, 6(3):557–600, 2016.

[12] Logan C. Hoehn and Lex G. Oversteegen. A complete classification of homogeneous plane continua. *Acta Math.*, 216(2):177–216, 2016.

[13] Sarah Koch, Kevin M. Pilgrim, and Nikita Selinger. Pullback invariants of Thurston maps. *Trans. Amer. Math. Soc.*, 368(7):4621–4655, 2016.

[14] Leonid Parnovski and Roman Shterenberg. Complete asymptotic expansion of the spectral function of multidimensional almost-periodic Schrödinger operators. *Duke Math. J.*, 165(3):509–561, 2016.

[15] Fabio Raman, Elizabeth Scribner, Olivier Saut, Cornelia Wenger, Thierry Colin, and Hassan M. Fathallah-Shaykh. Computational trials: Unraveling motility phenotypes, progression patterns, and treatment options for glioblastoma multiforme. *PLoS ONE*, 11(1):e0146617, 2016.

[16] Gnter Stolz. Many-body localization for disordered bosons. *New Journal of Physics*, 18(3):031002, 2016.

[17] Yanni Zeng. On Cauchy problems of thermal non-equilibrium flows with small data. *Bull. Braz. Math. Soc. (N.S.)*, 47(2):799–809, 2016.

[18] Yanni Zeng. Thermal non-equilibrium flows in three space dimensions. *Arch. Ration. Mech. Anal.*, 219(1):27–87, 2016.

[19] Yanni Zeng and Jiao Chen. Pointwise time asymptotic behavior of solutions to a general class of hyperbolic balance laws. *J. Differential Equations*, 260(8):6745–6786, 2016.