

Selected Articles by Research Fellows

MODHAMMED ABOUZAI

“Morse homology, tropical geometry, and mirror symmetry for toric varieties.” To appear in *Selecta Mathematica*.

“An open string analogue of Viterbo functoriality,” with P. Seidel. Preprint, arXiv:0712.3177.

SPYROS ALEXAKIS

“Renormalized area and properly embedded minimal surfaces in hyperbolic 3-manifolds,” with Rafe Mazzeo.

“A unique continuation theorem for the vacuum Einstein equations.”

ARTUR AVILA

“Hausdorff dimension and conformal measures of Feigenbaum Julia sets,” with M. Lyubich. *Journal of the American Mathematical Society* 21 (2008), 305-363.

“Absolute continuity of the integrated density of states for the almost Mathieu operator with non-critical coupling,” with D. Damanik. *Inventiones Mathematicae* 172 (2008), 439-453.

MARIA CHUDNOVSKY

“The Erodos Hajnal Conjecture for bull-free graphs,” with S. Safra. *Journal of Combinatorial Theory, Ser., B*, 98 (2008) 1301-1310.

“Cycles in dense digraphs,” with P. Seymour and B. Sullivan. *Combinatorica* 28 (2008), 1-18.

ADRIAN IOANA

“Cocycle superrigidity for profinite actions of property (T) groups.”

“Relative property (T) for the subequivalence relations induced by the action of $SL(2, \mathbb{Z})$ on T^2 .”

SOREN GALATIUS

“Stable homology of automorphism groups of free groups.” Submitted to *Ann. of Math.*

“Universal moduli spaces of surfaces with flat connections and cobordism theory,” with R. Cohen and N. Kitchloo. Submitted to *Adv. Math.*

BO'AZ KLARTAG

“On nearly radial marginals of high-dimensional probability measures.” Submitted.

“Economical toric spines via Cheeger’s Inequality,” with N. Alon. Submitted.

CIPRIAN MANOLESCU

“On the Khovanov and knot Floer homologies of quasi-alternating links,” with P. Ozsvath. *Proceedings of the 14th Gokova Geometry-Topology Conference* (2007), 60-81.

CIPRIAN MANOLESCU *continued*

“Combinatorial cobordism maps in hat Heegaard Floer theory,” with R. Lipshitz and J. Wang. *Duke Mathematical Journal* 145 (2008), 207-247.

DAVESH MAULIK

“Noether-Lefschetz theory and the Yau-Zaslow conjecture,” with A. Klemm, R. Pandharipande, and E. Scheidegger. arxiv: 0802.2739.

“Gromov-Witten/Donaldson-Thomas theory correspondence for toric threefolds,” with A. Oblomkov, A. Okounkov, and R. Pandharipande. arxiv: 0809.3976.

MARYAM MIRZAKHANI

“Ergodic theory of the earthquake flow.” *Int Math Res Notices* (2008) Vol. 2008.

“Ergodic theory of the space of measured laminations,” with Elon Lindenstrauss. *Int Math Res Notices* (2008).

SOPHIE MOREL

“Complexes pondérés sur les compactifications de Baily-Borel: Le cas des variétés de Siegel.” *J. Amer. Math. Soc.* 21 (2008), 23-61 ext.

“On the cohomology of certain non-compact Shimura varieties,” (with an appendix by R. Kottwitz). To appear in *Annals of Mathematics Studies*.

SAMUEL PAYNE

“Analytification is the limit of all tropicalizations.” Submitted. arXiv:0805.4035.

“Positivity for toric vector bundles,” with M. Hering and M. Mustata. To appear in *Ann. Inst. Fourier*. arXiv:0805.1916.

DAVID SPEYER

“Powers of Coxeter elements in infinite groups are reduced.” To appear in *Proceedings of the AMS*.

“Matching polytopes, toric geometry, and the non-negative part of the Grassmannian,” with Alex Postnikov and Lauren Williams. To appear in *Journal of Algebraic Combinatorics*.

TERUYOSHI YOSHIDA

“Local class field theory via Lubin-Tate theory.” To appear in *Annales de la Faculté des Sciences de Toulouse*, 17-2 (2008).

XINYI YUAN

“On volumes of arithmetic line bundles.”

“Heights of CM points I: Gross-Zagier formula,” with Shou-wu Zhang and Wei Zhang.