Selected Articles by Research Fellows

MANJUL BHARGAVA

"Higher composition laws I: A new view on Gauss composition, and quadratic generalizations," Annals of Mathematics (2), vol. 159, no. 1 (2004), 217–250.

"Higher composition laws II: On cubic analogues of Gauss composition," Annals of Mathematics (2), vol. 159, no. 2 (2004), 865–886.

DANIEL BISS

"K_g is not finitely generated," joint with B. Farb, submitted to Inventiones Mathematicae.

"The elephant in the internet," the Notices of the American Mathematical Society, Vol. 51.

ALEXEI BORODIN

"Random partitions and the gamma kernel," joint with G. Olshanski, Advances in Mathematics. Vol. 194, Issue 1 (20 June 2005), 141–202.

"Isomonodromy transformations of linear systems of difference equations," Annals of Mathematics, vol. 160, no. 3 (2004), 1141–1182.

MARIA CHUDNOVSKY

"The Strong Perfect Graph Theorem," joint with N. Robertson, P. Seymour and R. Thomas, to appear in Annals of Mathematics.

"Recognizing Berge Graphs," joint with G. Cornuejols, X. Liu, P. Seymour, and K.Vuskovic, Combinatorica Vol. 25 (2005), 143–187.

SERGEI GUKOV

"Khovanov-Rozansky Homology and Topological Strings," joint with Albert Schwarz and Cumrun Vafa, arXiv:hep-th/0412243.

"Topological M-theory as Unification of Form Theories of Gravity," joint with Robbert Dijkgraaf, Andrew Neitzke and Cumrun Vafa, arXiv:hep-th/0411073.

ELON LINDENSTRAUSS

"Existence and Weyl's law for spherical cusp forms," joint with Akshay Venkatesh, submitted, 24 pages.

"Invariant measures and the set of exceptions to Littlewood's conjecture," joint with Manfred Einsiedler and Anatole Katok, to appear Annals of Mathematics (45 pages),

CIPRIAN MANOLESCU

"Nilpotent slices, Hilbert schemes, and the Jones polynomial," (2004), to appear in Duke Mathematics Journal.

"A gluing theorem for the relative Bauer-Furuta invariants," (2003), arXiv:math.GT/0311342.

MARYAM MIRZAKHANI

"Growth of the number of simple closed geodesics on hyperbolic spaces," to appear in Annals of Mathematics.

"Weil-Petersson volumes and intersection theory on the moduli space of curves," submitted to Journal of the American Mathematical Society.

IGOR RODNIANSKI

"Small-amplitude nonlinear waves on a black hole background," joint with M. Dafermos, to appear in J. Math. Pures et Appl., arXiv:math.AP/0503024.

"Long-time decay estimates for the Schrödinger equation on manifolds," joint with T. Tao, submitted to Ann. Math. Studies, arXiv:math.AP/0412416.

ANDRÁS VASY

"Scattering for symbolic potentials of order zero and microlocal propagation near radial points," joint with A. Hassell and R. Melrose, submitted for publication.

"Absence of super-exponentially decaying eigenfunctions on Riemannian manifolds with pinched negative curvature," joint with J. Wunsch, to appear in Math. Res. Letters.

AKSHAY VENKATESH

"On uniform bounds for rational points on non-rational curves." joint with Jordan Ellenberg.

"Existence and Weyl's law for spherical cusp forms," joint with Elon Lindenstrauss, arXiv:math.NT/0503724.