Wednesday, 19 August

Invited Lectures

14:00 – 14:45

05 **Leonid Polterovich,** Tel Aviv University, Tel Aviv, Israel — **MA 001**
Geometry on the Group of Hamiltonian Diffeomorphisms *(I: p.77)*
Chair: Helmut H.W. Hofer

06 **Robert A. Oliver,** Université Paris-Nord, Villetaneuse, France — **MA 004**
Vector bundles over classifying spaces *(I: p.84)*
Chair: Charles B. Thomas

07 **Minoru Wakimoto,** Kyushu University, Fukuoka, Japan — **MA 005**
Representation theory of affine superalgebras at the critical level *(I: p.96)*
Chair: Richard E. Borcherds

09 **Zhihong Xia,** Northwestern University, Evanston, USA — **H 1012**
Arnold diffusion and variational construction of connecting orbits *(I: p.120)*
Chair: Klaus Kirchgässner

11 **Gian Michele Graf,** ETH Zürich, Zürich, Switzerland — **H 1028**
Stability of matter in classical and quantized fields *(I: p.134)*
Chair: Volker Bach

14 **Joan Feigenbaum,** AT&T Labs Research, Florham Park, USA — **H 2032**
Games, Complexity Classes, and Approximation Algorithms *(I: p.167)*
Chair: Hans J. Prömel

15:00 – 15:45

05 **Yongbin Ruan,** University of Wisconsin-Madison, Madison, USA — **MA 001**
Quantum cohomology and its applications *(I: p.77)*
Chair: Helmut H.W. Hofer

06 **Ronald A. Fintushel,** Michigan State University, East Lansing, USA — **MA 004**
Ronald J. Stern, University of California, Irvine, USA
Knot Surgery on 4-Manifolds *(I: p.86)*
Chair: Ulrich Koschorke

07 **Kari Vilonen,** Brandeis University, Waltham, USA — **MA 005**
Topological Methods in Representation Theory *(I: p.95)*
Chair: Wolfgang Soergel

09 **Welington de Melo,** IMPA, Rio de Janeiro, Brazil — **H 1012**
Renormalization and Rigidity in one dimensional smooth dynamical systems *(I: p.112)*
Chair: Bernold Fiedler

11 **Barry McCoy,** State University of New York, Stony Brook, USA — **H 1028**
Rogers-Ramanujan identities: A Century of progress from mathematics to physics *(I: p.135)*
Chair: Robert Schrader

14 **Toniann Pitassi,** University of Arizona, Tucson, USA — **H 2032**
Combinatorial and algebraic techniques in proof complexity *(I: p.171)*
Chair: Helmut Alt

16:15 – 17:00

04 **Robbert Dijkgraaf,** University of Amsterdam, Amsterdam, The Netherlands — **MA 005**
& *The Mathematics of Fivebranes* *(I: p.62)*
11 Chair: Fedor Smirnov

07 **Laurent Lafforgue,** Université Paris-Sud, Orsay, France **MA 004**
Chtoucas de Drinfeld et applications *(I: p.92)*
Chair: James Arthur

08 **Michael T. Lacey,** Georgia Institute of Technology, Atlanta, USA **MA 001**
On the Bilinear Hilbert Transform *(I: p.99)*
Chair: Elias M. Stein

10 **Fabrice Bethuel,** Université Paris-Sud, Orsay, France **H 1012**
Recent results for Ginzburg-Landau models *(I: p.121)*
Chair: Dmitri Yafaev

12 **David John Aldous,** University of California, Berkeley, USA **H 1028**
Stochastic Coalescence *(I: p.140)*
Chair: Friedrich Götze

17 **Jorge Nocedal,** Northwestern University, Evanston, USA **H 2032**
Nonlinear Optimization: The Interplay Between Mathematical Characterizations and Algorithms *(I: p.193)*
Chair: Margaret H. Wright

17:15 – 18:00

04 **Johan de Jong,** Princeton University, Princeton, USA **MA 005**
Barsotti-Tate groups and crystals *(I: p.61)*
Chair: Gerard van der Geer

07 **Robert Edward Kottwitz,** University of Chicago, Chicago, USA **MA 004**
Harmonic analysis on semisimple p-adic Lie algebras *(I: p.91)*
Chair: Michael Rapoport

08 **Kristian Seip,** Norwegian University of Science and Technology, Trondheim, Norway **MA 001**
Developments from Nonharmonic Fourier Series *(I: p.105)*
Chair: Klaus D. Bierstedt

10 **Robert R. Jensen,** Loyola University of Chicago, Chicago, USA **H 1012**
Viscosity solutions of elliptic partial differential equations *(I: p.122)*
Chair: Stefan Müller

12 **Jayanta Kumar Ghosh,** Indian Statistical Institute, Calcutta, India and Purdue University, West Lafayette, USA **H 1028**
Bayesian Density Estimation *(I: p.143)*
Chair: Vladimir I. Koltchinskii

17 **Jochem Zowe,** Universität Erlangen, Erlangen, Germany **H 2032**
What is the Best Material? — The Answer of a Mathematician *(I: p.196)*
Chair: Josef Stoer