



# Mathematisches Forschungsinstitut Oberwolfach

## Scientific Programme 2011

Participants of the workshops at Oberwolfach are invited personally by the Director of the Institute. The participation is subject to such an invitation. Interested researchers, in particular young mathematicians, can contact the administration of the Institute. Since the number of participants is restricted, not all inquiries can be considered. Information is also available on our website: <http://www.mfo.de> or <http://www.oberwolfach.org>

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| <b>02.01. – 08.01.2011</b> <b>Combinatorics</b><br>Organizers: Jeff Kahn, Piscataway<br>Angelika Steger, Zürich<br>Benny Sudakov, Los Angeles  | <b>01.05. – 07.05.2011</b> <b>Random Matrices, Geometric Functional Analysis and Algorithms</b><br>Organizers: Michel Ledoux, Toulouse<br>Mark Rudelson, Missouri<br>Gideon Schechtman, Rehovot  | <b>21.08. – 27.08.2011</b> <b>Mini-Workshops</b><br>(Deadline for Applications: 21.01.2011)<br>N.N.   |
| <b>09.01. – 15.01.2011</b> <b>Set Theory</b><br>Organizers: Sy-David Friedman, Vienna<br>Menachem Magidor, Jerusalem<br>W. Hugh Woodin, Berkeley   | <b>08.05. – 14.05.2011</b> <b>Billiards, Flat Surfaces, and Dynamics on Moduli Spaces</b><br>Organizers: Howard Masur, Chicago<br>Martin Möller, Bonn<br>Anton Zorich, Rennes  | <b>28.08. – 03.09.2011</b> <b>The Analytic Theory of Automorphic Forms</b><br>Organizers: Valentin Blomer, Toronto<br>Philippe Michel, Lausanne<br>Samuel J. Patterson, Göttingen   |
| <b>16.01. – 22.01.2011</b> <b>Mini-Workshops</b><br>(Deadline for Applications: 25.06.2010)<br>N.N.  | <b>15.05. – 21.05.2011</b> <b>Finite-dimensional Approximations of Discrete Groups</b><br>Organizers: Goulmira Arzhantseva, Genève<br>Andreas Thom, Göttingen<br>Alain Valette, Neuchâtel  | <b>04.09. – 10.09.2011</b> <b>Discrete Geometry</b><br>Organizers: Imre Barany, London<br>Jiri Matousek, Praha<br>Günter Rote, Berlin   |
| <b>23.01. – 29.01.2011</b> <b>Stochastic Analysis in Finance and Insurance</b><br>Organizers: Dmitry Kramkov, Pittsburgh<br>Martin Schweizer, Zürich<br>Nizar Touzi, Paris   | <b>15.05. – 21.05.2011</b> <b>New Directions in Algebraic K-Theory</b><br>Organizers: James F. Davis, Bloomington<br>Christian Haesemeyer, Los Angeles<br>Andrew Ranicki, Edinburgh<br>Marco Schlichting, Baton Rouge/Warwick          | <b>11.09. – 17.09.2011</b> <b>Noncommutative Geometry</b><br>Organizers: Alain Connes, Paris<br>Joachim Cuntz, Münster<br>Marc A. Rieffel, Berkeley<br>Guoliang Yu, Nashville   |
| <b>30.01. – 05.02.2011</b> <b>Trends in Mathematical Imaging and Surface Processing</b><br>Organizers: Vicent Caselles, Barcelona<br>Martin Rumpf, Bonn<br>Guillermo Sapiro, Minneapolis<br>Peter Schröder, Pasadena                           | <b>22.05. – 28.05.2011</b> <b>Schnelle Löser für Partielle Differentialgleichungen</b><br>Organizers: Randolph E. Bank, La Jolla<br>Wolfgang Hackbusch, Leipzig<br>Gabriel Wittum, Frankfurt   | <b>18.09. – 24.09.2011</b> <b>Homotopy Theory</b><br>Organizers: Paul Goerss, Evanston<br>John Greenlees, Sheffield<br>Stefan Schwede, Bonn   |
| <b>06.02. – 12.02.2011</b> <b>Topological and Geometric Combinatorics</b><br>Organizers: Anders Björner, Stockholm<br>Gil Kalai, Jerusalem<br>Isabella Novik, Seattle<br>Günter M. Ziegler, Berlin   | <b>29.05. – 04.06.2011</b> <b>Stochastic Analysis</b><br>Organizers: Alice Guionnet, Lyon<br>Wendelin Werner, Orsay<br>Ofer Zeitouni, Rehovot/Minnesota  | <b>25.09. – 01.10.2011</b> <b>Complex Algebraic Geometry</b><br>Organizers: Fabrizio Catanese, Bayreuth<br>Yujiro Kawamata, Tokyo<br>Bernd Siebert, Hamburg<br>Gang Tian, Princeton   |
| <b>13.02. – 19.02.2011</b> <b>Geometric Quantization in the Non-compact Setting</b><br>Organizers: Lisa Jeffrey, Toronto<br>Xiaonan Ma, Paris<br>Michele Vergne, Paris   | <b>05.06. – 11.06.2011</b> <b>Arithmetic Groups vs. Mapping Class Groups: Similarities, Analogies and Differences</b><br>Organizers: Benson Farb, Chicago<br>Lizhen Ji, Michigan<br>Enrico Leuzinger, Karlsruhe<br>Werner Müller, Bonn | <b>02.10. – 08.10.2011</b> <b>Very High Dimensional Semiparametric Models</b><br>Organizers: Arnold Janssen, Düsseldorf<br>Aad W. van der Vaart, Amsterdam<br>Jon A. Wellner, Seattle   |
| <b>20.02. – 26.02.2011</b> <b>Representation Theory of Quivers and Finite Dimensional Algebras</b><br>Organizers: Bill Crawley-Boevey, Leeds<br>Bernhard Keller, Paris<br>Henning Krause, Paderborn<br>Oyvind Solberg, Trondheim               | <b>12.06. – 18.06.2011</b> <b>Oberwolfach Seminars</b><br>(Subjects will be announced in winter 2010)<br>N.N.  | <b>09.10. – 15.10.2011</b> <b>Arbeitsgemeinschaft</b><br>(Subject will be announced in summer 2011)<br>N.N.   |
| <b>27.02. – 05.03.2011</b> <b>Mini-Workshops</b><br>(Deadline for Applications: 25.06.2010)<br>N.N.  | <b>19.06. – 25.06.2011</b> <b>Algebraische Zahlentheorie</b><br>Organizers: Benjamin Howard, Chestnut Hill<br>Guido Kings, Regensburg<br>Ramdorai Sujatha, Mumbai<br>Otmar Venjakob, Heidelberg  | <b>16.10. – 22.10.2011</b> <b>Oberwolfach Seminars</b><br>(Subjects will be announced in winter 2010)<br>N.N.   |
| <b>06.03. – 12.03.2011</b> <b>Automorphic Forms: New Directions</b><br>Organizers: Stephen S. Kudla, Toronto<br>Joachim Schwermer, Vienna  | <b>26.06. – 02.07.2011</b> <b>Mathematical Methods in Quantum Chemistry</b><br>Organizers: Gero Friesecke, München<br>Peter Gill, Canberra   | <b>23.10. – 29.10.2011</b> <b>Correlations and Interactions for Random Quantum Systems</b><br>Organizers: Peter D. Hislop, Kentucky<br>Werner Kirsch, Hagen<br>Peter Müller, München<br>Simone Warzel, München  |
| <b>13.03. – 19.03.2011</b> <b>The Renormalization Group</b><br>Organizers: Margherita Disertori, Saint Etienne<br>Joel Feldman, Vancouver<br>Manfred Salmhofer, Heidelberg   | <b>03.07. – 09.07.2011</b> <b>Differentialgeometrie im Großen</b><br>Organizers: Olivier Biquard, Paris<br>Xiuxiong Chen, Madison/Hefei<br>Bernhard Leeb, München<br>Gang Tian, Princeton/Beijing                                      | <b>30.10. – 05.11.2011</b> <b>Emigration of Mathematicians and Transmission of Mathematics: Historical Lessons and Consequences of the Third Reich</b><br>Organizers: June Barrow-Green, Milton-Keynes<br>Della Fenster, Richmond<br>Reinhard Siegmund-Schultze, Kristiansand |
| <b>20.03. – 26.03.2011</b> <b>Geometric Numerical Integration</b><br>Organizers: Ernst Hairer, Geneve<br>Marlis Hochbruck, Düsseldorf<br>Arieh Iserles, Cambridge<br>Christian Lubich, Tübingen  | <b>10.07. – 16.07.2011</b> <b>Dynamische Systeme</b><br>Organizers: Hakan Eliasson, Paris<br>Helmut W. Hofer, Princeton<br>Jean-Christophe Yoccoz, Paris   | <b>06.11. – 12.11.2011</b> <b>Mathematical Logic</b><br>Organizers: Samuel R. Buss, La Jolla<br>Ulrich Kohlenbach, Darmstadt<br>Michael Rathjen, Leeds  |
| <b>27.03. – 02.04.2011</b> <b>Operator Algebras and Representation Theory: Frames, Wavelets and Fractals</b><br>Organizers: Palle Jorgensen, Iowa City<br>Gitta Kutyniok, Osnabrück<br>Gestur Olafsson, Baton Rouge<br>Sergei Silvestrov, Lund | <b>17.07. – 23.07.2011</b> <b>Explicit Methods in Number Theory</b><br>Organizers: Karim Belabas, Talence<br>Hendrik W. Lenstra, Leiden<br>Don B. Zagier, Bonn   | <b>13.11. – 19.11.2011</b> <b>Combinatorial Optimization</b><br>Organizers: Michel X. Goemans, Cambridge MA<br>Monique Laurent, Amsterdam<br>Jens Vygen, Bonn   |
| <b>03.04. – 09.04.2011</b> <b>Arbeitsgemeinschaft</b><br>(Subject will be announced in winter 2010/11)<br>N.N.   | <b>24.07. – 30.07.2011</b> <b>Real Analysis, Harmonic Analysis and Applications</b><br>Organizers: Detlef Müller, Kiel<br>Christoph Thiele, Los Angeles  | <b>20.11. – 26.11.2011</b> <b>Oberwolfach Seminars</b><br>(Subjects will be announced in winter 2010)<br>N.N.   |
| <b>10.04. – 16.04.2011</b> <b>Geometric Methods of Complex Analysis</b><br>Organizers: Bo Berndtsson, Göteborg<br>John Eric Fornæss, Ann Arbor<br>Nikolay Shcherbina, Wuppertal  | <b>31.07. – 06.08.2011</b> <b>Computational Group Theory</b><br>Organizers: Bettina Eick, Braunschweig<br>Gerhard Hiß, Aachen<br>Derek Holt, Warwick<br>Eamonn O'Brien, Auckland   | <b>27.11. – 03.12.2011</b> <b>Geometric Partial Differential Equations: Theory, Numerics and Applications</b><br>Organizers: Gerhard Dziuk, Freiburg<br>Charles M. Elliott, Warwick<br>Gerhard Huisken, Golm<br>Ralf Kornhuber, Berlin  |
| <b>17.04. – 23.04.2011</b> <b>Real Enumerative Questions in Complex and Tropical Geometry</b><br>Organizers: Grigory Mikhalkin, Geneve<br>Eugenii Shustin, Tel Aviv<br>Johannes Walcher, Genève<br>Jean-Yves Welschinger, Lyon                 | <b>07.08. – 13.08.2011</b> <b>Partial Differential Equations</b><br>Organizers: Luigi Ambrosio, Pisa<br>Alice Chang, Princeton<br>Reiner Schätzle, Tübingen<br>Georg S. Weiss, Tokyo   | <b>04.12. – 10.12.2011</b> <b>Variational Methods for Evolution</b><br>Organizers: Alexander Mielke, Berlin<br>Felix Otto, Bonn<br>Giuseppe Savare, Pavia<br>Ulisse Stefanelli, Pavia   |
| <b>24.04. – 30.04.2011</b> <b>Mini-Workshops</b><br>(Deadline for Applications: 24.09.2010)<br>N.N.  | <b>14.08. – 20.08.2011</b> <b>Applied Dynamics and Geometric Mechanics</b><br>Organizers: Anthony M. Bloch, Ann Arbor<br>Tudor S. Ratiu, Lausanne<br>Jürgen Scheurle, München  | <b>11.12. – 17.12.2011</b> <b>Stratified Spaces: Joining Analysis, Topology and Geometry</b><br>Organizers: Markus Banagl, Heidelberg<br>Ulrich Bunke, Regensburg<br>Shmuel Weinberger, Chicago   |