



Scientific Program 2018

Participants of the Workshops at Oberwolfach are invited personally by the Director of the Institute. Participation is subject to such an invitation. Interested researchers, in particular junior scientists, can contact the administration of the Institute. Since the number of participants is restricted, not all inquiries can be considered.

07.01.2018 - 13.01.2018 (ID: 1802)

Computability Theory

Vasco Brattka, Neubiberg
Rod Downey, Wellington
Julia F. Knight, Notre Dame
Steffen Lempp, Madison

14.01.2018 - 20.01.2018 (ID: 1803)

Topology of Arrangements and Representation Stability

Graham Denham, London ON
Giovanni Gaiffi, Pisa
Rita Jiménez Rolland, Oaxaca de Juárez
Alexander Suci, Boston

21.01.2018 - 27.01.2018 (ID: 1804)

Statistics for Data with Geometric Structure

Aasa Feragen, Copenhagen
Thomas Hotz, Ilmenau
Stephan Huckemann, Göttingen
Ezra Miller, Durham

28.01.2018 - 03.02.2018 (ID: 1805)

Strongly Correlated Random Interacting Processes

Ron Peled, Tel Aviv
Vladas Sidoravicius, New York/Shanghai
Alexandre Stauffer, Bath

04.02.2018 - 10.02.2018 (ID: 1806)

Variational Methods for the Modelling of Inelastic Solids

Georg Dolzmann, Regensburg
Adriana Garroni, Roma
Klaus Hackl, Bochum
Michael Ortiz, Pasadena

11.02.2018 - 17.02.2018 (ID: 1807)

Interplay of Analysis and Probability in Applied Mathematics

Volker Betz, Darmstadt
Nicolas Dirr, Cardiff
Wolfgang König, Berlin
Florian Theil, Warwick

18.02.2018 - 24.02.2018 (ID: 1808)

Design and Analysis of Infectious Disease Studies

Martin Eichner, Tübingen
M. Elizabeth Halloran, Seattle
Philip O'Neill, Nottingham

25.02.2018 - 03.03.2018 (ID: 1809)

The Mathematics of Mechanobiology and Cell Signaling

Davide Ambrosi, Milano
Chun Liu, University Park
Matthias Röger, Dortmund
Angela Stevens, Münster

04.03.2018 - 10.03.2018 (ID: 1810a/b/c)

Mini-Workshops (deadline for proposals: 01 August 2017)

N.N.

11.03.2018 - 17.03.2018 (ID: 1811)

Statistical Inference for Structured High-dimensional Models

Anatoli Juditsky, Saint Martin d'Hères
Alexandre Tsybakov, Malakoff
Cun-Hui Zhang, Piscataway

18.03.2018 - 24.03.2018 (ID: 1812)

Mathematical Methods in Quantum Chemistry

Eric Cancès, Paris
Gero Friesecke, München
Trygve Ulf Helgaker, Oslo
Lin Lin, Berkeley

25.03.2018 - 31.03.2018 (ID: 1813)

Applied Harmonic Analysis and Data Processing

Ingrid Daubechies, Durham
Gitta Kutyniok, Berlin
Holger Rauhut, Aachen
Thomas Strohmer, Davis

01.04.2018 - 07.04.2018 (ID: 1814)

Arbeitsgemeinschaft (topic tba in summer 2017)

N.N.

08.04.2018 - 14.04.2018 (ID: 1815)

Challenges in Optimal Control of Nonlinear PDE-Systems

Michael Hintermüller, Berlin
Karl Kunisch, Graz
Günter Leugering, Erlangen
Elisabetta Rocca, Pavia

15.04.2018 - 21.04.2018 (ID: 1816a/b/c)

Mini-Workshops (deadline for proposals: 01 August 2016)

N.N.

22.04.2018 - 28.04.2018 (ID: 1817)

Nonlinear Data: Theory and Algorithms

Philipp Grohs, Wien
Oliver Sander, Dresden
Jean-Luc Starck, Gif-sur-Yvette
Johannes Wallner, Graz

29.04.2018 - 05.05.2018 (ID: 1818)

Quadratic Forms and Related Structures over Fields

Karim Johannes Becher, Antwerp
Detlev Hoffmann, Dortmund
Anne Quéguiner-Mathieu, Paris

06.05.2018 - 12.05.2018 (ID: 1819)

Interactions between Operator Space Theory and Quantum Probability with Applications to Quantum Information

Uwe Franz, Besançon
Marius Junge, Champaign
Gilles Pisier, College Station
Quanhua Xu, Besançon

13.05.2018 - 19.05.2018 (ID: 1820)

Enumerative Combinatorics

Mireille Bousquet-Mélou, Talence
Michael Drmota, Vienna
Christian Krattenthaler, Vienna
Marc Noy, Barcelona

20.05.2018 - 26.05.2018 (ID: 1821a/b)

Oberwolfach Seminars (topics tba in winter 2017)

N.N.

27.05.2018 - 02.06.2018 (ID: 1822)

Interactions between Algebraic Geometry and Noncommutative Algebra

Markus Reineke, Bochum
Toby Stafford, Manchester
Catharina Stroppel, Bonn
Michel Van den Bergh, Diepenbeek

03.06.2018 - 09.06.2018 (ID: 1823a)

Field Arithmetic

Lior Bary-Soroker, Tel Aviv
Florian Pop, Philadelphia
Jakob Stix, Frankfurt

03.06.2018 - 09.06.2018 (ID: 1823b)

Cohomological and Metric Properties of Groups of Homeomorphisms of \mathbb{R}

José Burillo, Barcelona
Kai-Uwe Bux, Bielefeld
Brita Nucinkis, London

10.06.2018 - 16.06.2018 (ID: 1824)

Geometrie

John Lott, Berkeley
André Neves, London
Iskander Taimanov, Novosibirsk
Burkhard Wilking, Münster

17.06.2018 - 23.06.2018 (ID: 1825a)

Subgroups of Cremona Groups

Fabrizio Catanese, Bayreuth
Ivan Cheltsov, Edinburgh
Julie Déserti, Paris
Yuri Prokhorov, Moscow

17.06.2018 - 23.06.2018 (ID: 1825b)

**Matrix Estimation Meets Statistical Network Analysis:
Extracting low-dimensional structures in high dimension**

Florentina Bunea, Ithaca
Angelika Rohde, Freiburg
Patrick Wolfe, London
Harrison Zhou, New Haven

24.06.2018 - 30.06.2018 (ID: 1826)

Algebraische Zahlentheorie

Guido Kings, Regensburg
Ramdorai Sujatha, Vancouver
Eric Urban, New York
Otmar Venjakob, Heidelberg

01.07.2018 - 07.07.2018 (ID: 1827)

Topologie

Mark Behrens, Notre Dame
Ruth Charney, Waltham
Peter Teichner, Bonn/Berkeley
Michael Weiss, Münster

08.07.2018 - 14.07.2018 (ID: 1828)

**Non-commutative Geometry, Index Theory
and Mathematical Physics**

Alain Connes, Paris
Ryszard Nest, Copenhagen
Thomas Schick, Göttingen
Guoliang Yu, College Station

15.07.2018 - 21.07.2018 (ID: 1829)

Classical Algebraic Geometry

Olivier Debarre, Paris
David Eisenbud, Berkeley
Gavril Farkas, Berlin
Ravi Vakil, Stanford

22.07.2018 - 28.07.2018 (ID: 1830)

Explicit Methods in Number Theory

Karim Belabas, Bordeaux
Bjorn Poonen, Cambridge MA
Fernando Rodriguez Villegas, Trieste

29.07.2018 - 04.08.2018 (ID: 1831)

Calculus of Variations

Alessio Figalli, Zürich
Robert V. Kohn, New York
Tatiana Toro, Seattle
Neshan Wickramasekera, Cambridge UK

05.08.2018 - 11.08.2018 (ID: 1832)

Mathematical General Relativity

Carla Cederbaum, Tübingen
Mihalis Dafermos, Princeton
Jim Isenberg, Eugene
Hans Ringström, Stockholm

12.08.2018 - 18.08.2018 (ID: 1833)

Geometric Methods of Complex Analysis

Bo Berndtsson, Göteborg
John Erik Forneaess, Trondheim
Nikolay Shcherbina, Wuppertal

19.08.2018 - 25.08.2018 (ID: 1834)

New Directions in Stochastic Optimisation

Jesús De Loera, Davis
Darinka Dentcheva, Hoboken
Georg Ch. Pflug, Vienna
Rüdiger Schultz, Essen

26.08.2018 - 01.09.2018 (ID: 1835)

Reactive Flows in Deformable, Complex Media

Margot Gerritsen, Stanford
Iuliu Sorin Pop, Diepenbeek
Florin Adrian Radu, Bergen
Barbara Wohlmuth, Garching

02.09.2018 - 08.09.2018 (ID: 1836)

New Trends in Teichmüller Theory and Mapping Class Groups

Ken'ichi Ohshika, Osaka
Athanasios Papadopoulos, Strasbourg
Robert C. Penner, Bures-sur-Yvette
Anna Wienhard, Heidelberg

09.09.2018 - 15.09.2018 (ID: 1837)

Scaling Limits in Models of Statistical Mechanics

Dmitry Ioffe, Haifa
Gady Kozma, Rehovot
Fabio Toninelli, Lyon

16.09.2018 - 22.09.2018 (ID: 1838)

Flat Surfaces and Algebraic Curves

Samuel Grushevsky, Stony Brook
Martin Möller, Frankfurt
Anton Zorich, Paris

23.09.2018 - 29.09.2018 (ID: 1839)

**Differential Equations arising from Organising Principles
in Biology**

Jose Antonio Carrillo, London
Alexander Lorz, Thuwal/Paris
Anna Marciniak-Czochra, Heidelberg
Benoît Perthame, Paris

30.09.2018 - 06.10.2018 (ID: 1840a/b/c)

Mini-Workshops (deadline for proposals: 01 April 2018)

N.N.

07.10.2018 - 12.10.2018 (ID: 1841)

Arbeitsgemeinschaft (topic tba in winter 2017)

N.N.

14.10.2018 - 20.10.2018 (ID: 1842a/b)

Oberwolfach Seminars (topics tba in winter 2017)

N.N.

21.10.2018 - 27.10.2018 (ID: 1843)

Computational Engineering

Olivier Allix, Cachan
Annalisa Buffa, Lausanne
Carsten Carstensen, Berlin
Joerg Schroeder, Essen

28.10.2018 - 03.11.2018 (ID: 1844)

**Emergence of Structures in Particle Systems: Mechanics,
Analysis and Computation**

Andrea Braides, Rome
Bernd Schmidt, Augsburg
Ulisse Stefanelli, Vienna
Florian Theil, Warwick

04.11.2018 - 10.11.2018 (ID: 1845)

Combinatorial Optimization

Jesus De Loera, Davis
Satoru Iwata, Tokyo
Martin Skutella, Berlin

11.11.2018 - 17.11.2018 (ID: 1846)

Complexity Theory

Peter Bürgisser, Berlin
Irit Dinur, Rehovot
Oded Goldreich, Rehovot
Salil Vadhan, Cambridge MA

18.11.2018 - 24.11.2018 (ID: 1847a/b)

Oberwolfach Seminars (topics tba in winter 2017)

N.N.

25.11.2018 - 01.12.2018 (ID: 1848)

Enveloping Algebras and Geometric Representation Theory

Iain Gordon, Edinburgh
Bernard Leclerc, Caen
Wolfgang Soergel, Freiburg

02.12.2018 - 08.12.2018 (ID: 1849)

Free Probability Theory

Alice Guionnet, Lyon
Roland Speicher, Saarbrücken
Dan Voiculescu, Berkeley

09.12.2018 - 15.12.2018 (ID: 1850)

Convex Geometry and its Applications

Franck Barthe, Toulouse
Martin Henk, Berlin
Monika Ludwig, Wien

16.12.2018 - 22.12.2018 (ID: 1851a/b/c)

Mini-Workshops (deadline for proposals: 01 April 2018)

N.N.