



Scientific Program 2023

Workshops

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.

01.01. - 07.01.2023 (ID: 2301)

Combinatorics

Peter Keevash, Oxford
Wojciech Samotij, Tel Aviv
Benny Sudakov, Zürich

08.01. - 14.01.2023 (ID: 2302)

Model Theory: Combinatorics, Groups, Valued Fields and Neostability

Itay Kaplan, Jerusalem
Silvain Rideau-Kikuchi, Paris
Katrin Tent, Münster
Frank Wagner, Villeurbanne

15.01. - 21.01.2023 (ID: 2303)

Low-dimensional Topology

Stefan Friedl, Regensburg
Yoav Moriah, Haifa
Jessica Purcell, Melbourne
Saul Schleimer, Warwick

22.01. - 28.01.2023 (ID: 2304)

Morphisms in Low Dimensions

Andrew Lobb, Durham
Maggie Miller, Stanford
Arunima Ray, Bonn

29.01. - 04.02.2023 (ID: 2305)

Arithmetic of Shimura Varieties

Laurent Fargues, Paris
Ulrich Görtz, Essen
Eva Viehmann, Garching
Torsten Wedhorn, Darmstadt

05.02. - 11.02.2023 (ID: 2306)

Resolutions in Local Algebra and Singularity Theory

Aldo Conca, Genova
Steven Dale Cutkosky, Columbia
Eleonore Faber, Leeds
Srikanth B. Iyengar, Salt Lake City

12.02. - 18.02.2023 (ID: 2307)

Representation Theory of Quivers and Finite-Dimensional Algebras

Claire Amiot, Gières
William Crawley-Boevey, Bielefeld
Osamu Iyama, Tokyo
Jan Schröer, Bonn

19.02. - 25.02.2023 (ID: 2308)

Design and Analysis of Infectious Disease Studies

Caroline Colijn, Burnaby
M. Elizabeth Halloran, Seattle
Pieter Trapman, Stockholm
Philip O'Neill, Nottingham

05.03. - 11.03.2023 (ID: 2310a)

MATRIX-MFO Tandem Workshop: Stochastic Reinforcement Processes and Graphs

Markus Heydenreich, München
Mark Holmes, Melbourne
Viktor Kleptsyn, Rennes
Cécille Mailler, Bath

05.03. - 11.03.2023 (ID: 2310b)

Optimization Problems for PDEs in Weak Space-Time Form

Helmut Harbrecht, Basel
Angela Kuno, Köln
Valeria Simoncini, Bologna
Karsten Urban, Ulm

12.03. - 18.03.2023 (ID: 2311)

Real Algebraic Geometry with a View toward Koopman Operator Methods

Didier Henrion, Toulouse
Salma Kuhlmann, Konstanz
Igor Mezic, Santa Barbara
Victor Vinnikov, Be'er Sheva

19.03. - 25.03.2023 (ID: 2312)

New Directions in Real Algebraic Geometry

Saugata Basu, West Lafayette
Mario Kummer, Dresden
Tim Netzer, Innsbruck
Cynthia Vinzant, Seattle

26.03. - 01.04.2023 (ID: 2313)

Random Graphs: Combinatorics, Complex Networks and Disordered Systems

Amin Coja-Oghlan, Frankfurt
Tobias Friedrich, Potsdam
Mihyun Kang, Graz
Konstantinos Panagiotou, München

09.04. - 15.04.2023 (ID: 2315)

Komplexe Analysis – Differential and Algebraic Methods in Kähler Spaces

Philippe Eyssidieux, Saint Martin d'Hères
Jun-Muk Hwang, Daejeon
Stefan Kebekus, Freiburg
Mihai Paun, Bayreuth

16.04. - 22.04.2023 (ID: 2316)

Representations of Finite Groups

Olivier Dudas, Paris
Meinolf Geck, Stuttgart
Radha Kessar, London
Gabriel Navarro, València

23.04. - 29.04.2023 (ID: 2317)

Mathematical Foundations of Biological Organisation

Jean-Pierre Eckmann, Genève
Karsten Kruse, Genève
Lai-Sang Young, New York

30.04. - 06.05.2023 (ID: 2318)

Tomographic Inverse Problems: Mathematical Challenges and Novel Applications

Simon Arridge, London
Martin Burger, Erlangen
Bernadette Hahn, Stuttgart
Eric Todd Quinto, Medford

07.05. - 13.05.2023 (ID: 2319)

Group Actions and Harmonic Analysis in Number Theory

Valentin Blomer, Bonn
Manfred Einsiedler, Zürich
Emmanuel Kowalski, Zürich
Maryna Viazovska, Lausanne

14.05. - 20.05.2023 (ID: 2320)

Tropical Methods in Geometry

Iliia Itenberg, Paris
Hannah Markwig, Tübingen
Kris Shaw, Oslo
Ilya Tyomkin, Be'er Sheva

21.05. - 27.05.2023 (ID: 2321)

Hypoelliptic Operators in Geometry

Davide Barilari, Padova
Xiaonan Ma, Paris
Nikhil Savale, Köln
Yi Wang, Baltimore

04.06. - 10.06.2023 (ID: 2323)

Incidence Problems in Harmonic Analysis, Geometric Measure Theory, and Ergodic Theory

Tuomas Orponen, Jyväskylä
Pablo Shmerkin, Vancouver
Hong Wang, Los Angeles

11.06. - 17.06.2023 (ID: 2324)

Machine Learning for Science: Mathematics at the Interface of Data-driven and Mechanistic Modelling

Neil Lawrence, Cambridge UK
Jessica Montgomery, Cambridge UK
Bernhard Schölkopf, Tübingen

18.06. - 24.06.2023 (ID: 2325)

Recent Trends in Algebraic Geometry

Olivier Debarre, Paris
Gavril Farkas, Berlin
Yuri Tschinkel, New York
Ravi Vakil, Stanford

25.06. - 01.07.2023 (ID: 2326)

Algebraische Zahlentheorie

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

02.07. - 08.07.2023 (ID: 2327)

Differentialgeometrie im Grossen

Richard Bamler, Berkeley
Otis Chodosh, Stanford
Urs Lang, Zürich
Ben Weinkove, Evanston

09.07. - 15.07.2023 (ID: 2328)

Dynamische Systeme

Marie-Claude Arnaud, Paris
Michael Hutchings, Berkeley
Vadim Kaloshin, Klosterneuburg

16.07. - 22.07.2023 (ID: 2329)

Transport and Scale Interactions in Geophysical Flows

Christian L. E. Franzke, Busan
Marcel Oliver, Bremen
Jens Rademacher, Bremen
Irina Rypina, Woods Hole

23.07. - 29.07.2023 (ID: 2330)

Partial Differential Equations

Guido De Philippis, New York
Ailana M. Fraser, Vancouver
Felix Schulze, Coventry

30.07. - 05.08.2023 (ID: 2331)

Teichmüller Theory: Classical, Higher, Super and Quantum

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

06.08. - 12.08.2023 (ID: 2332)

Homotopy Theory

Jesper Grodal, København
Mike Hill, Los Angeles
Birgit Richter, Hamburg

Miniworkshops

26.02. - 04.03.2023 (2309a/b/c), deadline for appl.: 4 September 2022
29.10. - 04.11.2023 (2344a/b/c), deadline for appl.: 7 May 2023
26.11. - 02.12.2023 (2348a/b/c), deadline for appl.: 7 May 2023
17.12. - 23.12.2023 (2351a/b/c), deadline for appl.: 7 May 2023

Tandem- or Miniworkshops

17.09. - 23.09.2023 (2338b/c) deadline for appl.: 31 July 2022
24.09. - 30.09.2023 (2339a/b/c) deadline for appl.: 31 July 2022

Arbeitsgemeinschaft (study group)

02.04. - 08.04.2023 (2314), to be announced in summer 2022
08.10. - 14.10.2023 (2341), to be announced in winter 2022
15.10. - 21.10.2023 (2342), to be announced in winter 2022

Oberwolfach Seminars

28.05. - 03.06.2023 (2322a/b), to be announced in winter 2022
22.10. - 28.10.2023 (2343a/b), to be announced in winter 2022
19.11. - 25.11.2023 (2347a/b), to be announced in winter 2022

13.08. - 19.08.2023 (ID: 2333)

Mixed-integer Nonlinear Optimization: A Hatchery for Modern Mathematics

Leo Liberti, Palaiseau
Sebastian Sager, Magdeburg
Angelika Wiegele, Klagenfurt

20.08. - 26.08.2023 (ID: 2334)

Geometric Spectral Theory

Asma Hassannezhad, Bristol
Luc Hillairet, Orléans
Konstantin Pankrashkin, Oldenburg
Iosif Polterovich, Montréal

27.08. - 02.09.2023 (ID: 2335)

Aspects of Aperiodic Order

Michael Baake, Bielefeld
Maria Isabel Cortez, Santiago de Chile
David Damanik, Houston
Nicolae Strungaru, Edmonton

03.09. - 09.09.2023 (ID: 2336)

Classical and Quantum Mechanical Models of Many-Particle Systems

Klemens Fellner, Graz
Isabelle Gallagher, Paris
Pierre-Emmanuel Jabin, University Park

10.09. - 16.09.2023 (ID: 2337)

Many-Body Quantum Systems

Christian Hainzl, München
Benjamin Schlein, Zürich
Robert Seiringer, Klosterneuburg
Simone Warzel, München

17.09. - 23.09.2023 (ID: 2338a)

Tensor-Triangular Geometry and Interactions

Paul Balmer, Los Angeles
Tobias Barthel, Bonn
John Greenlees, Coventry
Julia Pevtsova, Seattle

01.10. - 07.10.2023 (ID: 2340)

New Challenges in the Interplay between Finance and Insurance

Beatrice Acciaio, Zürich
Hansjörg Albrecher, Lausanne
Francesca Biagini, München
Thorsten Schmidt, Freiburg

05.11. - 11.11.2023 (ID: 2345)

Control Methods in Hyperbolic Partial Differential Equations

Fabio Ancona, Padua
Bani Anvari, London
Olivier Glass, Paris
Michael Herty, Aachen

12.11. - 18.11.2023 (ID: 2346)

Mathematical Logic: Proof Theory, Constructive Mathematics

Samuel R. Buss, La Jolla
Rosalie Iemhoff, Utrecht
Ulrich Kohlenbach, Darmstadt
Michael Rathjen, Leeds

03.12. - 09.12.2023 (ID: 2349)

Variational Methods for Evolution

Franca Hoffmann, Bonn
Alexander Mielke, Berlin
Mark Peletier, Eindhoven
Dejan Slepcev, Pittsburgh

10.12. - 16.12.2023 (ID: 2350)

Geometric, Algebraic, and Topological Combinatorics

Gil Kalai, Jerusalem
Isabella Novik, Seattle
Francisco Santos, Santander
Volkmar Welker, Marburg