

MSRI SUMMER GRADUATE SCHOOLS

In the summer of 2022, MSRI will offer 13 summer schools for graduate students from MSRI Academic Sponsors and other U.S. institutions. These schools provide students with the opportunity to learn from the top researchers in their fields, both in California and at partner institutions around the world.

ELIGIBILITY

Graduate students from MSRI Academic Sponsoring Institutions or from the mathematics department of any U.S. institution are eligible to apply.

MSRI is committed to the principles of Equal Opportunity and providing a welcoming environment free from discrimination. Students from groups underrepresented in the mathematical sciences (including women and gender-expansive individuals) are particularly encouraged to apply.

HOW TO APPLY

Graduate students must be nominated by their Director of Graduate Studies.

ENROLLMENT PERIOD

December 1, 2021 - February 1, 2022

ADMISSION

Admission is on a first-come, first-served basis up to the limits of the capacity of the school. Early nominations are not accepted.

SUPPORT

MSRI covers local expenses as well as partial travel expenses for accepted students.

MORE INFORMATION

msri.org/sgs



BERKELEY, CALIFORNIA: MSRI
(Mathematical Sciences
Research Institute)

June 6-17, 2022

**Integral Equations and
Applications**

Organizers: Fioralba Cakoni (University of Delaware), Dorina Mitrea (Baylor University), Irina Mitrea (Temple University), Shari Moskow (Drexel University)

July 5-15, 2022

Random Graphs

Organizers: Louigi Addario-Berry (McGill University), Remco van der Hofstad (Technische Universiteit Eindhoven)

MORAGA, CALIFORNIA:
St. Mary's College

July 5-15, 2022

**Algebraic Theory of
Differential and Difference
Equations, Model Theory and
their Applications**

Organizers: Alexey Ovchinnikov (Queens College, CUNY), Anand Pillay (University of Notre Dame), Thomas Scanlon (University of California, Berkeley), Michael Wibmer (University of Notre Dame)

July 25 - August 5, 2022

**Topological Methods for the
Discrete Mathematician**

Organizers: Pavle Blagojevic (Freie Universität Berlin / Serbian Academy of Sciences and Arts), Florian Frick (Carnegie Mellon University / Freie Universität Berlin), Shira Zerbib (Iowa State University)

August 1-12, 2022

Tropical Geometry

Organizers: Renzo Cavalieri (Colorado State University), Hannah Markwig (Eberhard Karls Universität Tübingen), Dhruv Ranganathan (University of Cambridge)

**ATHENS, GREECE: Stavros
Niarchos Foundation Cultural
Center**

June 20 - July 1, 2022

Geometric Flows

Organizers: Nicholas Alikakos (National and Kapodistrian University of Athens (University of Athens)), Panagiota Daskalopoulos (Columbia University)

This school is supported by:



**ITALY: INdAM (Istituto Nazionale
di Alta Matematica)**

July 2022 (Dates TBA)

**Mathematics of Machine
Learning**

Organizers: Sebastien Bubeck (Microsoft Research), Anna Karlin (University of Washington), Adith Swaminathan (Microsoft Research)

OXFORD, UNITED KINGDOM:
University of Oxford

July 11-22, 2022

**Metric Geometry and
Geometric Analysis**

Organizers: Cornelia Drutu (University of Oxford), Panos Papazoglou (University of Oxford)

**PARK CITY, UTAH: PCMI (Park
City Mathematics Institute)**

July 17 - August 6, 2022

**Number Theory Informed by
Computation**

Organizers: Jennifer Balakrishnan (Boston University), Rafe Mazzeo (Stanford University), Bjorn Poonen (Massachusetts Institute of Technology), Akshay Venkatesh (Institute for Advanced Study)

BRISBANE, AUSTRALIA: AMSI
(Australian Mathematical
Sciences Institute)

June 20 - July 1, 2022

**New Directions in
Representation Theory
Analysis**

Organizers: Tim Marchant (Australian Mathematical Sciences Institute), Joseph Grotowski (University of Queensland), Angela Coughlin (Australian Mathematical Sciences Institute), Ole Warnaar (University of Queensland), Geordie Williamson (University of Sydney)

**TAIPEI, TAIWAN: NCTS (National
Center for Theoretical Sciences)**

July 18-29, 2022

**Recent Topics in Well
Posedness**

Organizers: Jungkai Chen (National Taiwan University), Yoshikazu Giga (University of Tokyo), Maria Schonbek (University of California, Santa Cruz), Tsuyoshi Yoneda (University of Tokyo)

VANCOUVER, CANADA:
University of British Columbia

July 11-22, 2022

**Séminaire de Mathématiques
Supérieures 2022: Floer
Homotopy Theory**

Organizers: Kristen Hendricks (Rutgers University), Ailsa Keating (University of Cambridge), Robert Lipshitz (University of Oregon), Iosif Polterovich (Université de Montréal), Liam Watson (University of British Columbia), Ben Williams (University of British Columbia)

**BANFF, CANADA: BIRS (Banff
International Research Station)**

August 1-12, 2022

**Sums of Squares Method in
Geometry, Combinatorics
and Optimization**

Organizers: Grigoriy Blekherman (Georgia Institute of Technology), Annie Raymond (University of Massachusetts Amherst), Rekha Thomas (University of Washington)

**“...it was an incredible experience and
really inspired me to become a
professional mathematician.”**