

AGRA IV

Arithmetic, Groups and Analysis - Part 2

An IMPA - ICTP Hybrid School



20 - 25 June 2022
Cabo Frio - Rio de Janeiro - Brazil

Further information:
<http://indico.ictp.it/event/9809/>
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The AGRA series of summer schools (Santiago de Chile, 2012; Cusco, 2015; Córdoba, 2018; Online, 2021) has as its goal to foster the development of number theory in Latin America: it provides a formative experience for young researchers, and it also helps bring together more senior or mid-career mathematicians working in the field. It has been our tradition to have all courses and associated discussions in Spanish or Portuguese, in part so as to make all activities accessible to all students in Latin America, regardless of their English proficiency.

Description:

The target audience of AGRA includes undergraduate students, graduate students and young researchers with a serious interest in number theory and neighboring fields. Due to the pandemic situation, AGRA IV was divided in two instalments.

The first one was an IMPA - ICTP Online School that took place on August 16 - 20, 2021, with four minicourses covering topics in arithmetic combinatorics, arithmetic geometry, square-filled surfaces and algebraic number theory (see <http://indico.ictp.it/event/9617/>).

The plan for this second installment, which shall happen in hybrid mode in the state of Rio de Janeiro - Brazil, is to have a group of five minicourses, followed by tutorials and problem sessions, in themes related to ergodic theory, group approximations, analytic number theory, arithmetic groups and algebraic geometry.

Programme:

Minicourse 1:
Interactions between ergodic theory and number theory

- Joel Moreira (Warwick, UK)
- Sebastián Donoso (U. de Chile)

Minicourse 2:
Applications of homology and cohomology in group theory

- Lev Glebsky (U. Autonomía de San Luis Potosí, Mexico)
- Dessislava Kochloukova (Unicamp, Brazil)

Minicourse 3:
Expansion, divisibility and parity: a walk on numbers and graphs

- Harald Helfgott (Göttingen, Germany/CNRS, France)
- Adrián Ubis (UAM, Spain)

Minicourse 4:
Arithmetic groups and homogenous dynamics

- Sebastian Hurtado-Salazar (U. Chicago, USA)
- Plinio Pino (UFF, Brazil)

Minicourse 5:
Mori dream surfaces

- Michela Artebani (U. de Concepción, Chile)
- Antonio Laface (U. de Concepción, Chile)

Directors:

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P. Pino (UFF, Brazil)
F. Rodríguez-Villegas (ICTP, Italy)

How to apply:

Online application:
<http://indico.ictp.it/event/9809/>

Female scientists are encouraged to apply.

Grants:

Grants will be given to a selected number of participants.
On-site participants should either have been fully vaccinated or recovered from COVID.

Deadline:

15 May 2022



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