

AGRA IV (Arithmetic, Groups and Analysis) - Part 1 An IMPA - ICTP Online School



16 - 20 August 2021
Trieste, Italy

Further information:
<http://indico.ictp.it/event/9617/>
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The AGRA series of summer schools (Santiago de Chile, 2012; Cusco, 2015; Córdoba, 2018) 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 brings together senior and mid-career mathematicians working in the field. The primary languages for this event are going to be Spanish and Portuguese.

Description:

The target audience of AGRA includes undergraduate students, graduate students and young researchers with a serious interest in number theory and neighboring fields. The AGRA IV has been divided into two parts: part 1 is this online school in August 2021, while part 2 is preliminarily scheduled to take place in the first semester of 2022 in Cabo Frio, Brazil. The adjoined list of topics is representative of the two parts. The AGRA series has traditionally been held in Spanish but, this time, Spanish and Portuguese will share a role as primary languages of the school. Part 1 will consist of 4 minicourses delivered by a pool of distinguished mathematicians, followed by tutorials and problem sessions.

Topics:

- Arithmetic geometry
- Group approximations
- Arithmetic combinatorics
- Mahler measure
- Model theory
- Square-tiled surfaces
- Analytic methods in number theory

Programme:

- Minicourse 1:**
Introducción al análisis de Fourier de orden superior (Introduction to higher order Fourier analysis)
- Julia Wolf (Cambridge, UK)
 - Pablo Candela (UAM / ICMAT, Spain)
- Minicourse 2:**
Aritmética de variedades de alta dimensión (Arithmetic of high dimensional varieties)*
- Tony Varilly-Alvarado (Rice, USA)
 - Damiano Testa (Warwick, UK)
- Minicourse 3:**
Combinatória de superfícies quadriculadas e geometria de espaços de módulos (Combinatorics of lattice surfaces and geometry of moduli spaces)
- Carlos Matheus (École Polytechnique / CNRS, France)
 - Vincent Delecroix (Bordeaux / CNRS, France)
- Minicourse 4:**
Ecuaciones diofantinas con pocas soluciones (Diophantine equations with few solutions)
- Hector Pasten (PUC, Chile)

*preliminary title.

Directors:

- M. Belolipetsky (IMPA, Brazil)
- E. Carneiro (ICTP, Italy)
- D. Dimitrov (UNESP, Brazil)
- H. Helfgott (Göttingen, Germany / CNRS, France)
- M. Lalin (Montréal, Canada)
- S. Lima (IMPA, Brazil)
- Y. Lima (UFC, Brazil)
- A. Pacetti (Córdoba, Argentina)
- P. Pino (UFF, Brazil)
- F. Rodríguez-Villegas (ICTP, Italy)

How to apply:

Online application:
<http://indico.ictp.it/event/9617/>

Female scientists are encouraged to apply

Registration:

There is no registration fee.

Deadline:

26 July 2021



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