School on Commutative Algebra and Algebraic Geometry in Prime Characteristics

2 - 5 May 2023 An ICTP Meeting Trieste, Italy

The school will introduce commutative algebra and algebraic geometry in prime characteristics and their relationship with complex algebraic geometry.

There have been many important developments in these fields during the last three decades. There will be four courses of lectures to highlight some of these developments related to vector bundles and tight closure, singularities in prime characteristics, F-signature and Hilbert-Kunz multiplicity and study of singularities via Big Cohen-Macaulay (BCM)-algebras, perfectoid spaces and Frobenius splitting.

Topics:

- Vector bundles and tight closure
- Singularity invariants in positive characteristic
- Singularities via BCM Algebras
- F-singularities applications of characteristic p methods to singularity theory

Further information: http://indico.ictp.it/event/10200/ smr3866@ictp.it

Directors:

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Local Organiser:

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Speakers:

H. BRENNER, University of Osnabrueck, Germany I. SMIRNOV, Basque Centre for Applied

- Mathematics, Spain
- K. TUCKER, University of Illinois at Chicago, USA

K. WATANABE, Nihon University, Tokyo, Japan

How to apply:

Online application: http://indico.ictp.it/event/10200/

Female scientists are encouraged to apply.

Grants:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

Deadlines:

For applicants requesting financial and/or visa support:

10 March 2023

For all other applicants: 31 March 2023





