



School and Workshop on Arithmetic of Hyperelliptic Curves

28 August - 8 September 2017
Trieste, Italy

Further information:

Activity URL: <http://indico.ictp.it/event/7988/>

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The Abdus Salam International Centre for Theoretical Physics, in collaboration with the Engineering and Physical Sciences Research Council (EPSRC), is organising a School and Workshop on Arithmetic of Hyperelliptic Curves from 28 August - 8 September 2017.

Description:

Hyperelliptic curves are that are rapidly becoming a major topic in number theory. Demands for the theory are coming both from within pure mathematics (such as the pioneering work of Bhargava and his collaborators, and the Langlands programme), as well as from areas bordering to theoretical physics (via hypergeometric motives) and from cryptography, where one of the main methods for modern data encryption is based on hyperelliptic curves. The advanced school will focus on the modern techniques that have previously had major impacts on the theory of elliptic curves and that are likely to have great impact in the theory of hyperelliptic curves in the near future.

The workshop will focus on the most recent developments in the arithmetic of hyperelliptic curves, including, point counting techniques, distribution of locally soluble curves, hypergeometric motives, generalisations of Chabauty's method, Selmer ranks of Jacobians, etc.

Topics:

- L-functions and the Birch-Swinnerton-Dyer Conjecture
- Selmer groups
- Modularity
- Galois representations

Directors:

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Local Organizers:

F. RODRIGUEZ VILLEGAS, ICTP

How to apply:

Online application:
<http://indico.ictp.it/event/7988>

Applications from women are encouraged.

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.

Deadline:

1 May 2017

