Arithmetic and Geometry of Low Dimensional Algebraic Varieties
Special Session A23

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Algebraic Curves and Algebraic Surfaces are classical and fundamental topics in Algebraic Geometry, featuring profound and, at times, astonishing connections to various disciplines such as Differential Geometry, Symplectic Geometry, Complex Geometry, Commutative Algebra, and Number Theory. While many historical questions have been addressed, several open questions and challenging problems still lie before us.

The Special Session *Arithmetic and Geometry of Low Dimensional Algebraic Varieties*, scheduled on July 23-24, aims to convene numerous experts, with a specific focus on young scientists, to foster collaboration and facilitate discussions on the most recent advancements in these vital research domains.

A broad spectrum of topics will be explored, encompassing special families of curves, K3 and Abelian surfaces, surfaces of general type, Hodge structures, surfaces fibred in curves, automorphism groups, moduli spaces, rational points, and computational aspects. Special attention will be directed towards examining the interplay and connections between the arithmetic and geometric perspectives.

This Special Session will promote a robust exchange of ideas among individuals engaged in various aspects of the theory of Low-Dimensional Algebraic Varieties. Additionally, it will provide a valuable opportunity for Ph.D. students and postdocs to acquire insights into the latest results and techniques within these dynamic and rapidly evolving fields.

For more information visit
https://sites.google.com/view/low-dimensional-varieties-2024/home

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