



UNIVERSITÀ
DEGLI STUDI
DI PADOVA

Recent advances in Hamiltonian dynamics and symplectic topology

Menu

- [Home](#)
- [Abstracts and Program](#)
- [Contributed Talks](#)
- [Accommodation](#)
- [Registration and Contacts](#)
- [How to reach us](#)
- [Organizing Committee and Sponsors](#)
- [History of UniPd](#)
- [Docs of the school](#)
- [Participants](#)
- [Pictures](#)
- [Poster](#)
- [Related events](#)
- [Social Outing and Dinner](#)

12 - 16 February 2018, Department of Mathematics "Tullio Levi-Civita", University of Padova

The study of Hamiltonian dynamical systems plays a fundamental role in many different contexts, both in pure and applied mathematics. Indeed, most of the physical laws ruling our everyday lives --the motion of the celestial bodies in the universe, the geodesic flow on a manifold, a large set of mechanical systems-- they all share a common feature consisting in what is called a "Hamiltonian structure".

Recent advances in the study of Hamiltonian systems have been made possible thanks to a fruitful interaction between diverse ideas and techniques coming from **dynamical systems**, **nonlinear analysis**, **PDE theory** and **symplectic geometry**.

The School-Workshop aims at outlining these interactions and consist of 4 courses (6 hours each) lectured by well-known experts in the field.

- **M.-C. Arnaud (Univ. Avignon)** Tonelli Hamiltonians and their integrability.
- **G. Benedetti (Univ. Leipzig)** Systolic inequalities in contact and symplectic geometry.
- **A. Fathi (Georgia Tech.)** Some properties of viscosity solutions on a non-compact manifold.
- **V. Humilière (Univ. Pierre et Marie Curie)** Action selectors from symplectic topology and applications.

Speakers will outline a panorama of the state of the art, with emphasis on their recent contributions to the field. The meeting is aimed at all researchers interested in Hamiltonian dynamical systems and related topics. **Contributed Talks** concerning the themes of the School-Workshop are welcome.



Dipartimento di Matematica "Tullio Levi-Civita"