



## Colloquium Guido Castelnuovo

**Mercoledì 16 ottobre 2024**

Ore 16:30 - 17:30

### Flows on surfaces: dynamics and rigidity

Flows on surfaces are one of the most studied examples of dynamical systems, starting from the work of Poincaré at the end of the 19th century. Many models of systems of physical origin are described by flows on surfaces, e.g. in celestial mechanics, polygonal billiard dynamics, or solid-state physics.

While the topological structure of trajectories has been well understood already in the last century, the ergodic theory and the fine chaotic properties of flows which preserve area have been an active area of research in the last decades. In this talk, we will survey some of the results, as well as recent breakthroughs on linearisation and rigidity questions in higher genus.

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DIPARTIMENTO DI MATEMATICA



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