

## *DOTTORATO DI RICERCA IN FISICA*

### *CICLO XXXV*

**Webinar seminario su Microsoft Teams: 20 luglio 2020, ore 15-17**

**A dusty Universe.  
Composition and nature of interstellar dust as revealed by light scattering.**

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Dust is ubiquitous in the Universe. It's present in the Solar System and in a great variety of regions in the interstellar medium where it gives origin, mixed with the gas, to the amazing interstellar clouds. Once considered mainly as an annoying fog preventing a clear view of the stars, only in the last half century dust has found its right place in astronomy. It has become accepted that dust is a crucial component of galaxies and plays many important roles in star formation processes, in the evolution of the interstellar medium, in planet formation, and in promoting a complex chemistry that may in appropriate circumstances be the feedstock of biochemistry.

Analytical and computational techniques enable to model and study the optical properties of interstellar dust, enlarging our knowledge about their composition, nature, and morphology. We describe some current approaches, discussing their potential and possible limitations.