

Colloquium

SFB 956

Conditions and Impact of Star Formation

24 January 2022

Monday 3:30 p.m.

Physikalische Institute Köln

Videostream

Paola Caselli

Center for Astrochemical Studies, MPI for extraterrestrial physics, Garching, Germany

From Clouds to Planets: The Astrochemical Link

All ingredients to make stars like our Sun and planets like our Earth are present in dense cold interstellar clouds. In these „stellar-system precursors“ an active chemistry is already at work, as demonstrated by the presence of a rich variety of organic molecules in the gas phase and icy mantles encapsulating the sub-micrometer dust grains, the building blocks of planets. Here, I'll present a journey from the earliest phases of star formation to protoplanetary disks, with links to our Solar System, highlighting the crucial role of astrochemistry as powerful diagnostic tool of the various steps present in the journey.

