

Theoretical Insights into Star Formation: from the Early to the Present Day Universe

Friday 9 May 2025

Session 6: Cosmic Rays and Astrochemistry (09:10 - 13:00)

time	[id] title	presenter
09:10	[45] Cosmic rays and star formation	Dr REDAELLI, Elena
09:40	[48] Interpretable Machine Learning for Astrochemistry	GRASSI, Tommaso
10:00	[3] NEGATIVE ION CHEMISTRY AMONG STARS AND CLOUDS : MOLECULAR PROCESSES IN THE INTERSTELLAR MEDIUM	GIANTURCO, Francesco
10:20	[65] Cosmic ray ionization in the local Milky Way: How well do we understand it?	Dr IVLEV, Alexei
10:40	Coffee Break	
11:10	[20] Impacts of Energetic Particles from T Tauri Flares on Inner Protoplanetary Discs.	BRUNN, Valentin
11:30	[39] Transport of spectrally-resolved cosmic-ray protons and electrons in the multiphase interstellar medium	ARMILLOTTA, Lucia
11:50	[59] The Effect of Weak Cosmic Ray Heating Events on the Desorption of H ₂	SIPILÄ, Olli
12:10	[37] Chemical signatures of a prestellar cluster in the Galactic Center	COLZI, Laura
12:30	[63] Exploring the limits of chemical complexity in the interstellar medium: present and future	Dr RIVILLA, Víctor M.
12:50	[89] Poster session (8)	
	- [1] Understanding the mix of thermal and non-thermal emission in HII regions	SANCHEZ-MONGE, Alvaro
	- [2] Anomalously High Deuteration Fraction in a Translucent Molecular Cloud	LUO, Gan
	- [3] Bridging Hydrodynamics and Non-Equilibrium Chemistry: The Feasibility of Deep Learning Surrogates in Simulations	BRANCA, lorenzo
	- [4] Study of cosmic ray transport in young protostars: Impact of in- situ CR acceleration on hydrogen ionization	LIN, Nai Chieh