

# Intertwined Formation of H<sub>2</sub>, Dust, and Stars in Cosmological Simulations

*Wednesday, 31 July 2024 15:00 (30 minutes)*

In the metal-enriched interstellar medium, the abundance of molecular gas is primarily governed by the formation of H<sub>2</sub> on dust grains, as well as its self-shielding and shielding by dust against photo-dissociation by the interstellar radiation field. The upcoming presentation intends to describe a sub-resolution model for forming molecular hydrogen in hydrodynamic simulation with dust description and encouraging results in predicting the properties of galaxies in cosmological boxes.

**Primary author:** RAGONE FIGUEROA, Cinthia (Instituto de Astronomía Teórica y Experimental (IATE) CONICET-UNC)

**Presenter:** RAGONE FIGUEROA, Cinthia (Instituto de Astronomía Teórica y Experimental (IATE) CONICET-UNC)