ID de Contribution: **42** Type: **Oral presentation**

Constraining the Origin of Stellar Masses and of the Chemical Complexity in Hierarchical Infalling Clouds

mardi 9 février 2021 16:30 (15 minutes)

The formation of stars plays a central role in the evolution of the interstellar medium of galaxies, characterized by complex multi-scale mechanisms. In large hyperdense filaments generated by Galactic collisions between molecular clouds, cloud fragments called dense cores form, then collapse, converting their material in protostars. In order to survive this collapse and efficiently accrete gas, these protostars eject material in the form of jets that carve protostellar outflows in the surrounding medium. With this thesis, we propose to study the formation of stars in regions observed at high angular resolution in the frame of the ALMA-IMF large program. The scientific objectives are to characterize the cores and protostars (multiplicity, mass, temperature, evolutionary stage, chemistry) and to understand the effects likely to play a role in the determination of the final mass of the stars (kinematics/dynamics and magnetic fields at all scales, ejection processes⋯).

Field

InterStellar Medium

Day constaints

Auteur principal: ARMANTE, Mélanie (doctorate)

Orateur: ARMANTE, Mélanie (doctorate)

Classification de Session: Talk

Classification de thématique: Astrophysics