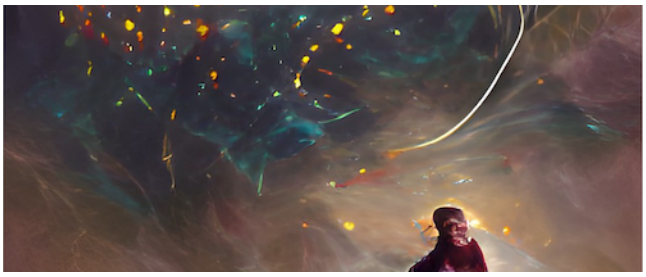

Contribution ID: **30** Type: **not specified**

A muti-wavelength analysis of a protocluster environment at the Cosmic Noon

Wednesday, 9 March 2022 09:20 (20 minutes)

The interplay between the large scale structure of the Universe and internal galaxy physical processes is one of the least understood questions in the field of galaxy evolution. Within this context, the study of clusters and protoclusters of galaxies provides crucial insights on the evolution of galaxies at scales and densities where environmental effects are most significant. We performed a muti-wavelength analysis of a protocluster at redshift z=2.3, where the combination of an enhanced cosmic start formation rate in the Universe and extensive data available allows us to perform a detailed study of the properties of protocluster members and their surrounding gas. Our analysis reveals complex morphology and kinematics of the circumgalactic gas, and indications of recent interaction between the galaxies and their surrounding gas up to intergalactic scales, that require state-of-the art physical interpretations.

Presenter: GALLEGO, Sofia (Caltech)

Session Classification: Day 3 Morning