

## Fifth Workshop on Millimetre Astronomy in Italy



Contribution ID: 9

Type: **not specified**

### **Viviana Casasola - The Interstellar Medium in nearby galaxies (Review invited)**

*Monday, 12 June 2023 14:00 (30 minutes)*

The Interstellar Medium (ISM) is of crucial importance for the formation and evolution of galaxies. It is in the environment from which stars are formed, the reservoir that fuels galaxy growth via star formation, the repository of material formed by stars, and a main tracer of internal and external processes affecting whole galaxies (e.g., AGN activity, galaxy interaction). For these reasons, significant efforts have been and are devoted to the characterization of the ISM in the galaxies of the Local Universe, where the proximity allows us to deeply explore the physics, the composition, and the distribution of the ISM. I will present a review of the main results emerging from recent studies on the ISM in nearby galaxies highlighting the heterogeneity of galaxy properties and the importance of resolved studies in the Local Universe in the context of galaxy evolution. Indeed, these studies also provide fundamental observational constraints to theoretical models and updated references for high-redshift studies.

**Session Classification:** Local Universe