

Invited: The formation of high-mass stellar clusters

- Adam Ginsburg

High-mass star clusters provide an important observational bridge between the present day local universe and the early universe. Local massive clusters ($M>10^4$ Msun), known as ‘young massive clusters’, can be seen forming in our own Galaxy and nearby galaxies, and these objects represent the closest observable analogs to the Globular clusters that formed >10 Gyr ago. I will review both the global context of these clusters and the state of their study in our Galaxy. Massive clusters are the most intense regions of star formation in the local universe, and their gravitational wells are deep enough to render weaker forms of feedback inconsequential. Some of the driving questions about these clusters include: do they accrete most of their mass once stars have already formed? Do they require unique conditions (e.g., cloud collisions) to form? Are there environments that preferentially form more stars in these clusters?

Clusters