



Contribution ID: 109

Type: **Presentation**

## Probing the super star cluster luminosity function in interacting luminous infrared galaxies

From a deep NIR adaptive optics imaging survey, we present thus-far the first K-band super star cluster (SSC) luminosity function (LF) to probe the formation and evolution of SSCs. Based on the derived LF one can constrain the cluster initial mass function (CIMF). Our preliminary results are in disagreement with theoretical expectations which suggest that SSC LFs should be well fitted by a single power law  $-2$ . We get power-law indices much shallower than the theoretically expected one.

**Primary author:** Ms RANDRIAMANAKOTO, Zara (Astronomy Department, Astrophysics, Cosmology and Gravity Centre, University of Cape Town)

**Co-authors:** Mr VAISANEN, Petri (South African Astronomical Observatory); Mr MATTILA, Seppo (Tuorla Observatory, University of Turku, Finland); Mr RYDER, Stuart (Anglo-Australian Observatory, Australia)

**Presenter:** Ms RANDRIAMANAKOTO, Zara (Astronomy Department, Astrophysics, Cosmology and Gravity Centre, University of Cape Town)

**Track Classification:** Track D1 - Astrophysics