

Outflows from Clusters of Massive Stars

- Summary of presentations:
 - Gayley: Thermal vs NT, uniform vs clumpy
 - Beuther: jet mechanism? High vs low mass?
 - Silich: Radiative cooling of winds important
 - Townsley: diffuse vs stellar xray emission
 - Lang: xraydio sources in the GC Arches cluster
 - Law: embedded sources vs external illumination

Outflows from Clusters of Massive Stars

- 3 types of massive outflows tracing cluster life:
 - Jets from young massive stars
 - Stellar winds from adult O and WR stars
 - SN ejecta with swept up ISM material
- Focusing on the winds as X-ray sources:
 - Do CWs always result in both radio and xray?
 - What is the degree of feedback between the two?
 - How does acceleration efficiency affect this?
 - How important is the partitioning of energy (ions vs electrons)?

What's Important?

- Investigate roles of:
 - Star formation (single or low mass coalescence, mixture of temperatures)
 - Turbulence (source and dissipation of)
 - Metallicity (effect on winds and cooling)
 - ISM (density, composition, magnetic fields)
 - Magnetic fields (orientation, strength)
 - Radiative cooling (affects scales)
- Tripod of observation, theory, and simulation seems out of whack: what should the latter two explore?