

MODEST-5 Workshop

WG1 (Klessen, Zinnecker) AIP
Potsdam

Klessen (theory): 3D-SPH simulations
+ turbulent fragmentation
prediction of IMF, mass, IMF;
effect of equation of state

Zinnecker (obs.): massive star formation
in dense young clusters
(BN/KL, A3603, 30 Dor)
evidence of stellar mergers?
multiplicity studies
M. Andersen PhD: IMF(r), mass segregation

5 Questions for MODEST dyn/evol calculations

- 1) how to include pre-MS stars (larger radii \rightarrow collisions)
- 2) how to include gas drag and accretion (Plummer phases + ?)
- 3) how to include gas removal from protocluster (HII region)
- 4) origin of Trapezium-type systems? merging of substructure?
- 5) origin of runaway star (3K object; AE Aur & μ Col dyn age)

message earliest phases of star cluster need to include
pre-MS effects (circumstellar disks) + GAS effects!