

Colloquium

SFB 956

Conditions and Impact of Star Formation

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Monday 3:30 p.m.

Physikalische Institute Köln

[Video stream](#)

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Fragmentation and Protocluster Formation

Most stars in our Galaxy are born in clusters. How molecular clouds collapse and fragment to give rise to a cluster of stars with a range of stellar masses remains an open question. The physical conditions in clouds harboring protoclusters limit the Jeans mass to about 1 Msun. This creates a puzzle for massive star formation since dense cores much greater than 1 Msun tend to further fragment into lower mass cores. Recent sensitive and high angular resolution observations of cluster forming clouds begin to unravel the complex process of fragmentation. My talk will review the recent progress in fragmentation studies. I will present observations of protocluster forming clumps and discuss the role of turbulence and magnetic fields in the formation of protostellar cores.