



Seminar, Department of Physical Sciences, Bose Institute, Kolkata

Formation and Evolution of the very FIRST STARS
(primordial stars) in the Universe

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Abstract: In this talk, we will briefly discuss the physics behind the formation and evolution of the very first stars in our observable universe with a particular focus on their possible existence in the present-day galaxies. We present a simple computational set-up of classical solid-body rotations of different realizations of the unstable gas-clumps that formed within the dark matter minihaloes. The high resolution 3D hydrodynamic simulations are capable of investigating the protostellar evolution and development of the circumstellar disk that fragments further to form the first protostar. In this context, we also elaborate our current understanding of their probability of survival as main-sequence stars till today.

Date/time: December 15, 2023 (Friday) at 12:00 noon

Venue: Physics Seminar Room (204, second floor, UAC, BI)