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Department of Physics
SEMINAR

Galaxy Formation: Progress, Challenges, and Opportunities

by

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ALL INTERESTED ARE WELCOME

Abstract

The formation of galaxies is a core astrophysical problem that spans a wide range of physical and astrophysical processes. Due to the extremely large dynamic ranges, it is also a supercomputing challenge. I will briefly review the progress made in the past fifty years, explain the current situation, and emphasize the main challenges and rare equalized opportunities for students entering this golden age. I will, as an illustration of the opportunities, present a new physical process that is currently missing in galaxy formation simulations but has the potential to change the direction of the field of cosmological simulations.