

Astrophysics Seminar

Monday April 3, 2017



Clusters of Galaxies: Laboratories for Probing the Interplay between Baryons and Dark Matter

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As the most massive collapsed structures in the Universe, galaxy clusters are unique laboratories for studying the evolution of baryons in concert with dark matter particles, as well as for exploring the nature of dark matter, and dark energy. The thermodynamical state of the intra-cluster gas has been extensively studied through multi-wavelength X-ray and radio (Sunyaev Zel'dovich effect) observations. I will highlight the most recent measurements of a) the evolution of baryons in the deep potential wells of clusters, b) the potential of utilizing clusters in cosmological studies and indirect searches for dark matter with a particular focus on the candidate 3.5 keV emission line.



3:30pm in CAS 502. *Refreshments served at 3:15pm in CAS 500.*

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Thursday
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