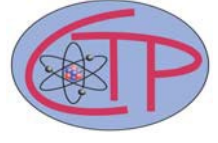




NEW YORK CITY COLLEGE OF TECHNOLOGY
Physics Department
Center for Theoretical Physics



How gas flows funnel satellite galaxies around Milky-Way analogs

Presented by

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Physics Department, City Tech

Thursday, March 14 at 12:00 noon

Room 801, NAAM Building



Satellite galaxies around our own galaxy, the Milky Way, and its local neighbors display a puzzling behavior. They tend to orbit together in thin planes. This observation has sparked a lot of debates in the Astrophysics community as some argue satellites should display more erratic dynamics and this finding could point at discrepancies in our cosmological model. Using a

large, high resolution cosmological simulations, we investigate whether this is really the issue. We find that planes of satellites actually naturally arise due to interactions with the large-scale structure of the Universe, the cosmic web. In this talk, I will describe the initial debate and how our findings offer an elegant solution that will have us explore deeply the dynamics of gas in our Universe.