

Ann Marie Madigan – Astronomy seminar 10/3/2018

The Importance of Being Eccentric

The dynamics of bodies on eccentric orbits largely determines the evolution of planetary systems and stars near massive black holes. In this talk I will review eccentric dynamics and demonstrate wide-ranging implications such as the orbital clustering of Kuiper Belt objects in the outer solar system (which motivates the planet nine hypothesis), ‘double’ galactic nuclei, and the tidal disruptions of stars by massive black holes in post-merger galaxies.