



PHYSICS AND ASTRONOMY COLLOQUIUM

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“The Mysterious Ophiuchus Stellar System”

Abstract

Stellar streams are remnants of dwarf satellite galaxies and globular clusters that were accreted by the Milky Way. The streams are promising tools for constraining the properties of the Galactic gravitational potential, but first we need to precisely measure their kinematics and understand their dynamical evolution. In this talk, I will present a follow up study of the Ophiuchus stellar stream, a mysteriously short stream located about 5 kpc from the Galactic Center.

I will show how a probabilistic approach and a rich data set can be used to tightly constrain i) the distance, ii) the 3D kinematics, iii) the chemical abundance, iv) and the orbit of the Ophiuchus stream, and how these characteristics help unravel the puzzle of the Ophiuchus stream.

Thursday, February 18, 2016

3:40 p.m.

Elliott Building

Room 167