



Contribution ID: 135

Type: **Talk**

Probing the nature of dark matter with gravitational lensing

Monday, July 23, 2018 11:50 AM (25 minutes)

The particle nature of dark matter affects the progression of structure formation in the universe. On small scales, differences between the standard cold dark matter picture and alternatives, such as warm or self-interacting dark matter, become especially pronounced. Gravitational lensing provides a mechanism to directly probe the density profiles and overall abundance of low mass dark matter halos through their gravitational distortion of light emitted from a background galaxy. I will describe various techniques that yield data from strong lenses to probe dark matter on small scales, and forecast the constraining power of these methods in years to come.

Primary author: Mr GILMAN, Daniel (UCLA)

Presenters: Mr GILMAN, Daniel (UCLA); GILMAN, DANIEL

Session Classification: 1.2 Plenary Session

Track Classification: Plenary