Dark matter and Dark Energy, the enigmatic dominant constituents of our Universe shape the properties of structures. However, their essential nature remains unknown.

Gravitational lensing, the bending of light by matter predicted by Einstein’s Theory of General Relativity offers a powerful probe of both dark matter and dark energy. Deploying clusters of galaxies as gravitational lenses a viewed by the Hubble Space Telescope we have many interesting new results - I will present a status report of recent progress in this talk.

Bio: Dr. Natarajan is a theoretical astrophysicist interested in cosmology, gravitational lensing and black hole physics. Her research involves mapping the detailed distribution of dark matter in the universe exploiting the bending of light en-route to us from distant galaxies. In particular, she has focused on making dark matter maps of clusters of galaxies, the largest known repositories of dark matter.