

## Vulcano Workshop 2018 - Frontier Objects in Astrophysics and Particle Physics



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### **Hints on the nature of DM from gravitational lensing**

Strong gravitational lensing, in which light is bent and distorted by massive objects, provides a powerful probe into the dark Universe. I will discuss strong gravitational lensing constraints on the abundance and mass of massive compact objects, as well as on the halo mass function and the free-streaming length of particle dark matter. I will conclude by describing how the next generation of telescopes will enable several orders of magnitude improvement in the mass sensitivity of these measurements.

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