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Using Gravitational Lensing to measure Dark Matter and Dark Energy in the Universe

Friday, 28 June 2019 12:30 (1h 15m)

Gravitational lensing is the bending of the path of light near massive bodies. Mass produces a curvature of space time, and light follows a curved path that is calculable using the General Theory of Relativity. I will discuss how the
lensing effect is used to measure the amount of Dark Matter in galaxies and in the universe as a whole. I will also discuss how we use lensing to measure the properties of the mysterious Dark Energy that is driving the accelerated expansion of our universe.

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