

# Gravitational lensing induced by matter currents

*jeudi 8 juin 2023 09:45 (15 minutes)*

In this talk I will present the effects of gravitational lensing induced by the motion of massive objects. This is a relativistic effect and is much weaker than the deflection of light by density inhomogeneities. I show that while subdominant to the density term future surveys will be able to measure this effect by cross-correlating the lensing convergence field with a reconstructed cosmic-momentum field. I present details of this reconstruction from galaxy redshift surveys and present forecasts for the combination of LSST with other next generation cosmological surveys.

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