

# JOINT TUFTS/MIT COSMOLOGY SEMINAR

---

## *Cosmic Magnetic Shear of Blazars*

Cyril Creque-Sarbinowski  
Flatiron Institute

I will show that the presence of a stochastic intergalactic magnetic field in the Universe induces correlated quadrupolar distortions on the gamma-ray images of blazars in the sky. Using an E- and B-mode decomposition of an all-sky gamma-ray shear map, I will then quantify the strength of the resulting two-point signal and estimate Fermi-LAT's sensitivity to it. Such a decomposition also allows one to distinguish parity-even and -odd magnetic fields. I will also comment on the relation of this technique to other blazar-based methods of probing intergalactic magnetic fields.

Tuesday, October 29, 2024, 2:30 pm

574 Boston Ave, Room 402

Tufts University

Refreshments at 2:00 outside room 304