

Modified Gravity vs Dark Interactions: Settling the Dispute through the Distortion of Time

Tuesday, May 14, 2024 12:15 PM (5 minutes)

Combining measurements of the growth rate of cosmic structures with gravitational lensing is considered as the optimal way to test for deviations from General Relativity on cosmological scales. In my talk, I will demonstrate that this standard method suffers from an important limitation, since models of dark matter with additional interactions can lead to exactly the same signatures as modified gravity in these two observables. Luckily, I will show that the coming generation of large-scale structure surveys, like the Square Kilometer Array, will allow us to break this degeneracy through measurements of the distortion of time.

Would you be interested in presenting a poster? (this will not impact the decision on your talk)

yes

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