

test parity violation signal from stochastic gravitational wave background

Sunday 5 May 2024 12:00 (20 minutes)

A successful measurement of the Stochastic Gravitational Wave Background (SGWB) in Pulsar Timing Arrays (PTAs) would open up a new window through which to test the predictions of General Relativity (GR). Astrometry on the other side also holds the potential for testing fundamental physics through the effects of the Stochastic Gravitational Wave Background (SGWB) in the $\sim 1 - 100$ nHz frequency band on precision measurements of stellar positions. In this talk, I will discuss how these measurements might reveal deviations from GR by studying the overlap reduction function, and its generalization in astrometry survey.

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