

Stochastic gravitational wave background constraints from Gaia DR3 astrometry

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Astrometric surveys can be used to constrain the stochastic gravitational wave background (SGWB) at very low frequencies. The European Space Agency's (ESA) Gaia mission, launched in 2013 and with a recent data release (DR3) in 2022, shows great potential for this purpose. In this talk, I will present a recent work in which we used Gaia DR3 to set constraints on the SGWB amplitude. I will also comment on previous works which computed similar constraints and discuss the potential of future Gaia data releases to impose tighter bounds.

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