

# The astrometric contribution of Gaia binary systems

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With *Gaia* we have a thousand-fold increase in the number of stars and the precision with which we can observe their motion, which allows us to see previously rare phenomena in great numbers and detail. Astrometric binaries are a fantastic example of this - around half of all stars are binaries and precise astrometry enables us to detect a large fraction of these, with periods from months to decades. I'll talk about the different astrometric signals binary systems produce, how we can identify them now, and how those observations will evolve and improve over the lifetime of the *Gaia* survey. Finally, I'll show how combining astrometric and spectroscopic noise we can go on to infer a first guess at the period and mass ratio of these binaries.

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