
A supersharp view of the Universe with optical interferometry

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Abstract

Dual-field interferometry, enabled by the GRAVITY instrument at the Very Large Telescope Interferometer, achieves very precise astrometry, of the order of 10 to 100 microarcseconds. It has directly detected exoplanets, such as Beta Pictoris b, which are beyond the reach of other instruments. This presentation will provide a brief history of the technique, discuss recent advancements leveraging Gaia astrometry, and explore future prospects in light of upcoming Gaia data releases, the Extremely Large Telescope (ELT), and future space missions.

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