



ID de Contribution: 352

Type: **Contribution orale**

## Utilizing state of the art technologies for a modern stellar intensity interferometer: recent results and ongoing developments of the I2C instrument

vendredi 7 juillet 2023 09:30 (20 minutes)

A modern implementation of the Hanbury Brown and Twiss effect in astronomy, otherwise known as stellar intensity interferometry, offers a powerful and robust capability for performing high angular resolution measurements of stellar targets at short optical wavelengths. Advances in the capabilities of detectors and high time resolution electronics have revived interest in the technique prompting many groups world-wide to pursue intensity interferometry instruments. Here, we provide an overview and ongoing developments of the I2C stellar intensity interferometer. The I2C instrument has been successfully deployed at several observation sites world-wide, and primarily with facilities available on the Calern Plateau site of the Observatoire de la Côte d'Azur. In this talk we will share recent results and discuss future plans that aim to substantially improve the sensitivity and scientific capability of the instrument.

### Affiliation de l'auteur principal

Institut de Physique de Nice, Université Côte d'Azur

**Auteur principal:** MATTHEWS, Nolan (Institut de Physique de Nice)

**Co-auteurs:** COURDE, Clémont; VERNET, David; VAKILI, Farrokh; LABEYRIE, Guillaume; RIVET, Jean-Pierre; CHABÉ, Julien; Dr HUGBART, Mathilde; Dr LAI, Olivier; Dr KAISER, Robin; GUERIN, William (INPHYNI)

**Orateur:** MATTHEWS, Nolan (Institut de Physique de Nice)

**Classification de Session:** Mini-colloques: MC17 Astrophotonique: optique moderne pour l'instrumentation astronomique

**Classification de thématique:** MC17 Astrophotonique : optique moderne pour l'instrumentation astronomique