

Abstract Submitted  
for the APR09 Meeting of  
The American Physical Society

**A new look on Intensity Interferometry** PAUL NUNEZ, STEPHAN LE BOHEC, DAVID KIEDA, University of Utah, RICHARD HOLMES, Nutronics Inc., INTENSITY INTERFEROMETRY WORKING GROUP TEAM — Intensity interferometry was introduced in the 1950's and implemented in the late 1960's with the Narrabri Interferometer. Very high angular resolution at visible wavelengths made it possible to measure stellar diameters of a few milli-arc-seconds. Air Cherenkov telescope arrays used for high energy gamma-ray astronomy can provide perfect sites for a revival of Intensity Interferometry in the optical region. Also, improvements in technology make the implementation of Intensity Interferometry easier and can improve sensitivity. Novel ideas on phase recovery also make it possible to reconstruct high resolution optical images of astrophysical objects in a model independent way. The capabilities and limitations of modern intensity interferometry are discussed.

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Date submitted: 09 Jan 2009

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