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Pioneering high angular resolution at GTC: FRIDA

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Abstract

FRIDA imager and integral-field spectrograph will provide the GTC community with the first diffraction-limited angular resolutions of a 10 m telescope: 25 - 40 mas in the 1 - 2.5 um range. These angular resolutions are a factor 15 improvement with respect to those of current and /or planned instruments for GTC, factor 1.5 superior to that of JWST. In this talk I will develop on science paths for FRIDA, with natural and laser guide star that illustrate the potential and unique capabilities of GTCAO+FRIDA till the arrival of the ELTs.