

SHARK-NIR: the coronagraphic camera getting ready for the first-light at the LBT

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SHARK-NIR is a coronagraphic instrument conceived to exploit the excellent performance in terms of resolution and contrast of the LBT Adaptive Optics system SOUL. Coupled with its visible counterpart SHARK-VIS, it will offer the possibility to perform binocular observations combining direct imaging, coronagraphic imaging and coronagraphic low resolution spectroscopy in a wide wavelength domain, going from $0.5\mu\text{m}$ to $1.7\mu\text{m}$. Additionally, the contemporary usage of LMIRCam, the coronagraphic LBTI NIR camera, working from K to M band, will extend even more the covered wavelength range. The main scientific goal of SHARK-NIR is imaging of exoplanets, both for the discovery of new exoplanets and for the characterization of existing ones, however the analysis and study of protoplanetary disks, stellar jets, AGN, QSOs and solar system bodies are within the already foreseen scientific cases of the instrument. We will describe on the final design and actual hardware specifications of the SHARK-NIR instrument and their direct impact of the achievable science. The overall status of the project, currently in its integration and verification phase and whose technical first-light is foreseen by the end of 2020, will be reported.

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