

The 4 meter New Robotic Telescope

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The time domain astronomy will radically change in the coming decade, with the advent of facilities like LSST, SKA, CTA, etc that will find huge numbers of transients across the electromagnetic spectrum, and with the detections via non-electromagnetic signals, such as gravitational waves. Within this context, we plan to build the New Robotic Telescope (NRT), a 4 m optical and near infrared telescope that will be installed at the ORM observatory in La Palma (Spain), and will operate in an entirely autonomous and robotic way. The project is promoted by the Liverpool John Moores University (UK) and the Instituto de Astrofísica de Canarias (Spain). The telescope is being designed for extremely rapid response, so it will be able to start collecting take data within 30 seconds after receiving a trigger from another facility. When NRT enters into operation in 2023 will make it a world-leading facility for the study of fast fading transients and explosive phenomena discovered at early times. In addition, it will allow great efficiency for large-scale programmes of low-to-intermediate resolution spectral classification of transients. Here, we present the status and scheduling of the project, and the main science drivers.

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