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The New Robotic Telescope's Polarimetry Plan

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The New Robotic Telescope (NRT) is a 4-metre class, fully autonomous, robotic optical facility due to join the Liverpool Telescope on Roque de los Muchachos on the Canary Island of La Palma, Spain in 2026. With a time-to-target requirement of 30 seconds, the NRT will be one of the earliest-responding ground-based facilities to provide optical spectroscopic, polarimetric and photometric observations of explosive and energetic targets identified by survey and satellite telescopes. One of the main science foci of the NRT is the exploitation of facility's polarimetric capabilities; particularly in the context of synchrotron-emitting objects such as gamma-ray bursts and blazars, along with dusty environments.

I will present the Liverpool Telescope's polarimetric successes over the past 18 years, and show how these shape the NRT's science and instrumentation requirements. I will then discuss the NRT's capabilities in the context of polarimetric science over the coming years and invite the community to contribute and comment on key NRT scheduling and instrumentation requirements.

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