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Nova Studies with Global Networks of Telescopes

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Abstract

Classical and recurrent novae offer powerful laboratories for studying binary interactions, accretion physics, and explosive nucleosynthesis. However, despite their brightness, our understanding of their early-time evolution remains limited by observational cadence and geographical coverage. The identification of the time of maximum brightness — a key reference point for characterising the eruption energetics, light curve morphology, and early spectroscopic phases — is often poorly constrained due to the sporadic nature of follow-up. In this contribution, I will present recent results and challenges in time-domain studies of novae, with an emphasis on the importance of high-cadence, multi-longitude photometric monitoring. I will argue that the proposed BRICS network of telescopes could play a transformative role in nova science, enabling coordinated, round-the-clock coverage of eruptions across hemispheres. Such a framework would allow us to capture critical early-time data and facilitate rapid spectroscopic classification, contributing to a more complete understanding of these transients and their role in close binary evolution.