Rethinking the Fundamentals of Classical Nova Explosions

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Over the past few years, a revolution has been taking place in our understanding of classical novae, largely driven by the discovery of GeV gamma-rays emanating from these garden-variety explosions. These gamma-rays hint that shocks are energetically important—perhaps even dominant—in novae. I will present our burgeoning understanding of shocks in novae, from both multi-wavelength observational and theoretical perspectives. I will also show that novae can be used as testbeds to understand other shock-powered explosions, like stellar mergers and super-luminous supernovae.

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