

Recent insights on novae explosions at gamma rays

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A nova is a thermonuclear runaway explosion that takes place at the surface of a white dwarf in a binary system. The detection of novae at high-energy gamma rays (HE, $E > 100$ MeV) in 2010 unveiled the extreme conditions that take place when a nova outburst occurs. At the same time, these detections posed a number of questions on the hadronic or leptonic origin of the gamma-ray emission, on the particle acceleration mechanisms at act, and on the maximum energies attainable in these explosions. Further insights into these questions have been recently obtained following the first-detection ever of a nova explosion at very-high energy gamma rays (VHE, $E > 100$ GeV), the source RS Ophiuchi. In this talk I will review the latest results on novae explosions at VHEs and the implications of their detection in this energy range. I will also provide updated perspectives for current and future Cherenkov facilities to detect new novae explosions occurring in our Galaxy in the next years.

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