

I N T E G R A LScience Data Centre UNIVERSITÉ DE GENÈVE FACULTÉ DES SCIENCES Département d'astronomie

Centre attaché à l'Observatoire de Genève

ASTROPHYSICS SEMINAR



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The X-ray view of Classical Novae

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Abstract. Classical Novae are thermonuclear explosions that occur in stellar binary systems consisting of a solar-like star and a so-called White Dwarf, an old stellar object that has shrunk to a degree of compactness that it consists only of degenerate matter after having lost all of its hydrogen. Mass transfer from the solar-like star to the White Dwarf provides new hydrogen-rich material that will ignite a nuclear fusion reaction chain. While this principle is always the same, all Classical Novae observed so far have been quite different in their evolution. X-ray observations reveal central pieces of information as they allow insights into the hottest processes. I will give a description of the typical evolution of Classical Novae and show examples of X-ray spectra during the different phases of evolution. A more detailed view also illustrates how different the evolution can be when different system parameters are given.

Additional Information

The seminars are given in the ISDC "Pavillon" building Address: INTEGRAL Science Data Centre, ch. d'Écogia 16, CH-1290 Versoix WWW: ISDC Seminars: http://isdc.unige.ch/?Science+seminars