Contribution ID: 35 Type: Review talk

MHD Simulations of Type I Bursts

Tuesday, 6 May 2025 11:45 (30 minutes)

When Neutron Stars are in orbit with a companion star, they can capture the outer layers of the latter. This new matter can burn unstably on the surface of the star and explode in bright X-ray flashes called the Type I Bursts.

In this talk I will show results of MHD modelling of the flame during the Type I Bursts and discuss its link to observations and to the properties of the neutron stars such as their magnetic fields or their interior physics.

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Session Classification: Tuesday morning

Track Classification: Compact stars