7th Heidelberg International Symposium on High-Energy Gamma-Ray Astronomy

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Relativistic magnetic bombs

Wednesday, 6 July 2022 17:00 (15 minutes)

We develop models of magnetically-driven relativistic explosions, with application to flares from Soft Gamma-Ray Repeaters and Fast Radio Bursts. Non-stationarity, and the conservation of magnetic flux make magnetized explosion qualitatively different from stationary MHD flows, as well as fluid explosions. We study generation of relativistic coronal ejection, conditions for generating causally-disconnected flows, and later dynamics of ejected structures.

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