

Exploring the late-time gamma-ray burst afterglow at Very High Energies with H.E.S.S.

Thursday, 15 April 2021 07:30 (15 minutes)

The field of gamma-ray bursts (GRBs) is often advanced by detections of spectacular individual events. Most recently, H.E.S.S. detected VHE emission from GRB 190829A for three consecutive nights, up to 56 hours after the burst began, providing an unprecedented opportunity to study the late-time VHE afterglow spectrum. By combining the simultaneous Swift-XRT and H.E.S.S. observations, some curious similarities of the temporal and spectral behavior of the X-ray and VHE emission can be seen. We will discuss the questions that GRB 190829A raises, that challenge the standard models for VHE afterglow modelling and GRB physics.

Primary author: ZHU, Sylvia

Presenter: ZHU, Sylvia

Session Classification: Exploring the Cosmos: GRB-2

Track Classification: Gamma-ray Bursts