Contribution ID: 2 Type: Talk

SS433 tens TeV resurgence twin beams by beta decay in flight of tens PeV neutron jet

Monday, 26 May 2025 14:30 (15 minutes)

The understanding of microquasars in our galaxy is one of the frontiers of high energy astrophysics. Their models are based on a capturing mass Black Hole, with a nearby spiraling binary companion star. The companion star mass feeds the accretion disk around the Black Hole. This energy also fuels an orthogonal precessing X gamma jets. The spiral precessing tail of such microquasars, as the SS433 system, is due to an ultra-relativistic jet, spraying nucleons and electrons at relativistic speeds. The up-down jet is observable in radio, X, gamma spectra. Its long spirals are spread and diluted within a light-year distance. The source is inside the W50 supernova remnant nebula , whose asymmetry reflects the past and present role of the SS433 jet. Very recently HESS, HAWC discovered, surprisingly at a much far disconnected distance from the SS433, the resurgence of a twin gamma beam tail. Nearly 75 years light distance far away from the source. We show the frame of a possible model based on tens PeV jet whose beta decay in flight fit the TeV signals. CTAO might test soon this model.

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Session Classification: Rapid talks