

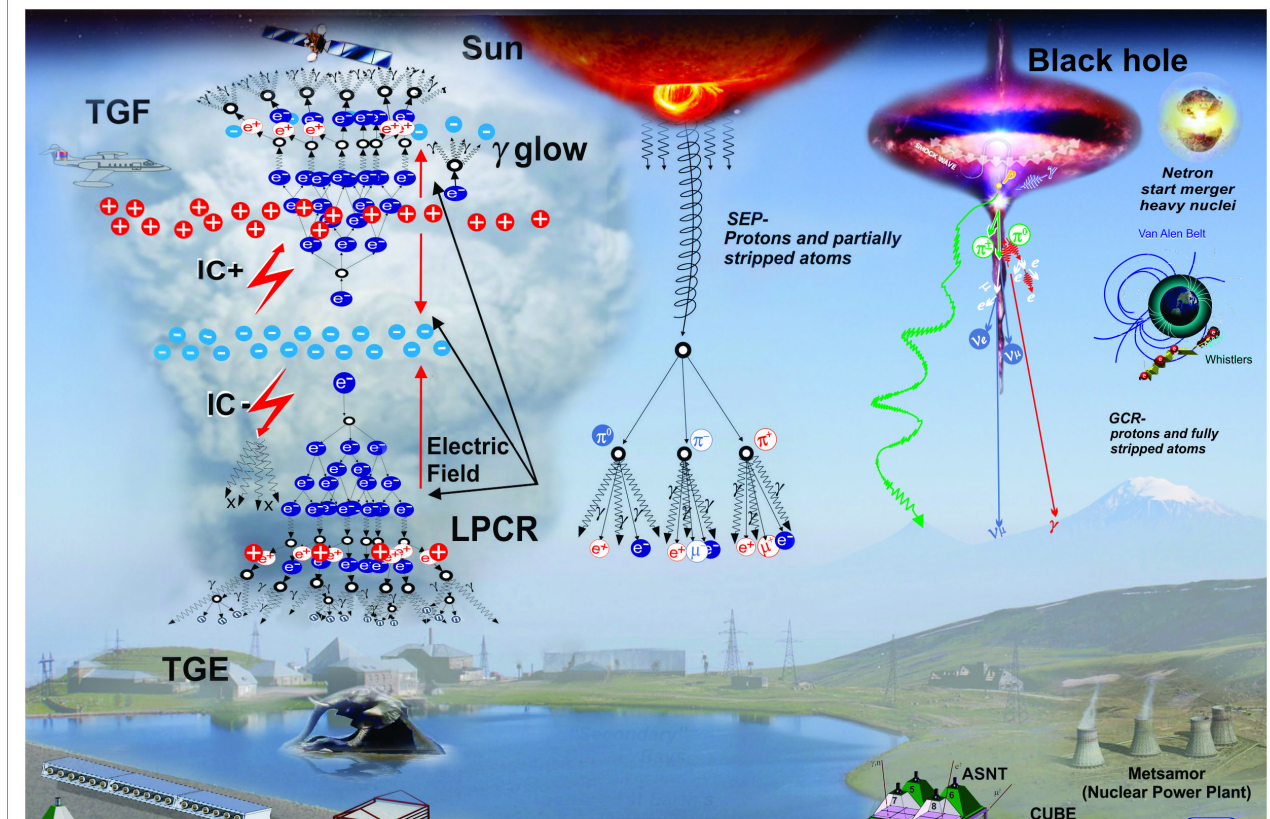
AE33A-3408: Catalog of 2017 Thunderstorm Ground Enhancement (TGE) events observed on Aragats

Wednesday, 12 December 2018

13:40 - 18:00

📍 Convention Ctr - Hall A-C (Poster Hall)

The natural electron accelerator in the clouds above Aragats high-altitude research station in Armenia operates continuously in 2017 providing more than 100 Thunderstorm Ground enhancements (TGEs). Raw data are available from via the ADEI interactive WEB platform. Most important discovery based on analysis of 2017 data is observation and description of the long-lasting low energy TGE (LLL TGE); TGE started with low energy flux of several tens of minutes, turning to short intense peak containing high-energy particles; further decay of TGE extended several hours. To acquire the expected new knowledge, data samples are joining to make possible a multivariate correlation analysis. The developed methodology provides analysis tools to integrate a multitude of space and geophysical observations into a system that fully utilized the scientific potential of current and future geophysical observations. ADEI multivariate visualization and statistical analysis platform make analytical work on the sophisticated problems rather easy; one can try and test many hypotheses very fast and come to definite conclusion allowing crosscheck and validation.



Authors

Gayane Karapetyan
Yerevan Physics Institute

Hripsime Mkrtchyan
Yerevan Physics Institute

Ashot Agassi Chilingarian

Yerevan Physics Institute

Balabek Sargsyan

Yerevan Physics Institute

Suren Chilingarian

Yerevan Physics Institute

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