

## **Performance of the Multigap Resistive Plate Chambers of the Extreme Energy Events Project**

*Monday, 19 February 2018 15:00 (20 minutes)*

The muon telescopes of the Extreme Energy Events (EEE) Project are made of three Multigap Resistive Plate Chambers (MRPC). The EEE array is composed, so far, of 53 telescopes and is organized in clusters and single telescope stations distributed all over the Italian territory. They are installed in High Schools with the aim to join research and teaching activities, by involving researchers and students in the construction, maintenance, data taking and data analysis. The unconventional working sites, mainly school buildings with non-professional electrical lines, non-controlled environmental parameters and heterogeneous maintenance conditions, are a unique test field for checking the robustness, the low-aging features and the long-lasting performance of the MRPC technology for particle tracking and timing purposes. The measurements performed with the EEE array require excellent performance in terms of time and spatial resolution, efficiency, tracking capability and stability. The data from two recent coordinated data taking periods, named Run 2 and Run 3, have been used to measure these quantities and the results are described, together with a comparison with expectations and with the results from beam test performed in 2006 at CERN.

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