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### **P1.34: Ecological transition for the gas mixtures of the MRPC cosmic ray telescopes of the EEE project**

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The Extreme Energy Events (EEE) experiment consists of 61 muon telescopes based on Multigap Resistive Plate Chambers (MRPC), each telescope composed of 3 chambers filled with gas.

The EEE Collaboration is fully involved in the ecological transition of the gas mixture used in the detectors. The use of the standard gas mixture (98%  $C_2H_2F_4$  - 2%  $SF_6$ ) was discontinued in favor of an alternative green mixture mainly based on  $C_3H_2F_4$  with the addition of He or  $CO_2$ . The gas mixture currently being tested guarantee a significant reduction of Global Warming Potential (GWP) to reduce the emission of gases potentially contributing to the greenhouse effect.

Several EEE detectors are today completely fluxed with the new ecological mixture. This contribution will report recent results obtained with the alternative, eco-friendly, mixture, in terms of time and space resolution, detection efficiency, tracking capability and stability over long data taking periods.

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