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Status of the microwave detection of cosmic rays program at the Pierre Auger Observatory

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Radiation in the microwave band from the passage of charged particles through air has been detected in the laboratory. Applied to extensive air showers this radiation could provide a novel technique for ultra-high energy cosmic rays detection over large area, with 100% duty cycle and virtually no atmospheric attenuation. Detection in the GHz band is being actively pursued at the Pierre Auger Observatory. The status of microwave R&D activities at Auger will be reported, and in particular the design and performances of AMBER and MIDAS, two different prototypes of an imaging parabolic dish detector, will be reviewed.

Primary author: FACAL SAN LUIS, Pedro (U)

Presenter: FACAL SAN LUIS, Pedro (U)

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