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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.

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