

Radio detection of cosmic rays - achievements and future potential

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When modern efforts for radio detection of cosmic rays started about a decade ago, hopes were high but the true potential was unknown. Since then, we have achieved a detailed understanding of the radio emission physics and have consequently succeeded in developing sophisticated detection schemes and analysis approaches. In particular, we have demonstrated that the important air-shower parameters arrival direction, particle energy and depth of shower maximum can be reconstructed reliably from radio measurements, with a precision that is comparable with that of other detection techniques. In this talk I will review the achievements of the radio detection technique made with various experiments over the past decade, and discuss the potential for future application in existing and new experiments for cosmic-ray detection.

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