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# Radio Detection: Advances, Challenges, and Future Directions

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Pioneered in the early 2000's, radio is now an established technique for the detection of ultra-high energy particles of cosmic origin. I will introduce the basic concepts of radio emission by the extensive particle showers induced by the interaction in the atmosphere of these cosmic messengers, and the detection of these electromagnetic radiations by radio antennas. I will present the experimental status of the main projects in the field, stress the challenges specific to autonomous radio detection, and review the prospects in the field for the next decade.

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