Applications of High-Power Millimeter Waves in Fusion Energy Research[*]

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Abstract. High-power millimeter wave sources are a key enabling technology in fusion energy research. The present state of the art of application of these sources to the areas of heating, current generation, and scattering for diagnostic purposes in fusion plasmas is reviewed here. The extrapolation of these applications to future devices and the requirements which they place on sources and transmission lines are also discussed.

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