

## Investigation of turbulence in reversed field pinch plasma by using microwave imaging reflectometry

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Turbulence in the reversed field pinch (RFP) plasma has been investigated by using the microwave imaging reflectometry in the toroidal pinch experiment RX (TPE-RX). In conventional RFP plasma, the fluctuations are dominated by the intermittent blob-like structures. These structures are accompanied with the generation of magnetic field, the strong turbulence, and high nonlinear coupling among the high and low  $k$  modes. The pulsed poloidal current drive operation, which improves the plasma confinement significantly, suppresses the dynamo, the turbulence, and the blob-like structures. © 2011 American Institute of Physics. [doi:[10.1063/1.3652848](https://doi.org/10.1063/1.3652848)]