

## Nonlinear Analysis of Decimetric Solar Bursts

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The solar radio emissions in the decimetric frequency range (above 1000 MHz) are very rich in temporal and/or spectral fine structures whose temporal pattern variability is related to nonlinear processes occurring in the magnetic structure on the corresponding active region. In this paper we obtained the gradient spectra,  $G(\alpha)$ , and singularity spectrum,  $f(\alpha)$ , taking into account the multifractal approach to study the turbulence-like signature coming from the underlying physics involving a complex magnetic loop interactions. Results from show intermittent behavior on small scales and  $G(\alpha)$  a turbulent spectra of -1.5 for many time scales. We interpret our findings as evidence of inhomogeneous MHD turbulence where a multifractal magnetic process is a candidate for the underlying process driving the intermittent burst events observed in the range of 1.6 to 3 GHz .

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