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## The IMFogram: a new time-frequency representation algorithm for nonstationary signals

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In this presentation, we introduce the IMFogram method (pronounced like "infogram"), which is a new, fast, local, and reliable time-frequency representation (TFR) method for nonstationary signals. This technique is based on the Intrinsic Mode Functions (IMFs) decomposition produced by a decomposition method, like the Empirical Mode Decomposition-based techniques, Iterative Filtering-based algorithms, or any equivalent method developed so far. We present the mathematical properties of the IMFogram, and show the proof that this method is a generalization of the Spectrogram. We conclude the presentation with some applications, as well as a comparison of its performance with other existing TFR techniques.