



Non-stationary stochastic processes defined in wavelet domain

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We propose an equivalence class of linear non-stationary stochastic processes defined in the wavelet domain by the use of wavelet multipliers. These processes exhibit well defined time dependent spectral properties and thus allow to simulate realizations of any non-stationary linear processes. We recall basic properties of continuous wavelet transformation and discuss their impact on the processes defined. The concept is illustrated with a conceptual example and applications as time dependent bootstrapping are presented.