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Limit theory for integrated supOU processes

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Superpositions of Ornstein-Uhlenbeck type (supOU) processes provide a rich class of stationary stochastic processes for which the marginal distribution and the dependence structure may be modeled independently. We investigate the limiting behavior of integrated supOU processes. The limit theorems will be presented both for the finite and infinite variance case. We next establish the asymptotic behavior of moments by measuring the rate of growth of moments in time. The integrated supOU process may exhibit a phenomenon known as intermittency. We also discuss some implications of intermittency.

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