

An Introduction to Ornstein–Uhlenbeck Processes

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September 2021

The Ornstein-Uhlenbeck (OU) process follows this stochastic differential equation (SDE)

$$dx_t = -\theta x_t dt + \sigma dW_t$$

Occasionally it will be revised for this drift coefficient

$$dx_t = \theta(\mu - x_t)dt + \sigma dW_t$$