

# REFLECTED ROUSE MODEL

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Rouse model is a theoretical framework designed to describe the dynamics of a polymer in dilute solution. In this talk, a variant of Rouse model, reflected Rouse model, is introduced in an attempt to explain “reptation” in polymer dynamics and is formulated into Reflected Stochastic Partial Differential Equations (RSPDE) in domains in  $\mathbb{R}^3$ . Existence and uniqueness problems in the upper-half space of  $\mathbb{R}^3$  are discussed.