Stochastic differential equations are employed in many application areas to model randomness in the dynamics, the influence of physical noise or uncertainty in system parameters. Numerical methods play a significant role in the investigation of these mathematical models and consequently the development of numerical methods has been an area of considerable interest in recent years.

In this talk I will provide a brief introduction to stochastic differential equations and their numerics and then discuss recent results concerning the topic linear stability analysis of numerical methods for stochastic differential equations.