

**Abstract.** In this talk, I will firstly give an elementary introduction to the open quantum systems undergoing continuous-time measurements. Then, I will consider the stabilization problem of spin systems with misspecification of initial states and model parameters. I will outline our method to provide sufficient conditions on the feedback controller and a valid domain of estimated parameters which ensure the exponential stabilization of the system. In the end, I will propose an approximated filter to exponentially stabilize the system which is robust to the misspecification of initial states and model parameters.