**Bao Quoc Tang**

*Complex balanced chemical reaction networks*

Chemical reaction network (CRN) theory was initiated back in 1970s with the idea of using mathematical tools to investigate large and complicated real world chemical systems. Although the ODE setting of CRNs is extensively studied, the PDE setting is on the other hand less investigated. In this talk, we present recent studies concerning PDE setting of a large class of CRNs called complex balanced systems with an emphasis on the large time behaviour of solutions using entropy method. In particular, we showed that for systems without boundary equilibria, any renormalised solution converges exponentially to equilibrium with a rate, which can be computed explicitly up to a finite dimensional inequality.