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**Anne Shiu\*** ([annejls@math.berkeley.edu](mailto:annejls@math.berkeley.edu)), Dept. of Mathematics, University of California Berkeley, Berkeley, CA 94720-3840. *Toric Dynamical Systems*.

In a chemical reaction network, the concentrations of chemical species evolve in time, governed by the polynomial differential equations of mass-action kinetics. This talk provides an introduction to the algebraic study of chemical reaction network theory. We introduce the moduli space of toric dynamical systems, the nicest chemical reaction networks whose steady state loci and defining moduli spaces are toric varieties. In chemistry, these are the systems whose steady states are a special kind, called complex balancing steady states.

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