1048-15-60   **J William Helton***, Math Dept, UC San Diego, La Jolla, CA 92093, and **Igor Klep**, Math Dept, Univ of Ljubljana, Jadranska 19, Ljublja, Slovenia. *Signed matrices and chemical reaction networks*. Preliminary report.

A signed matrix is actually a class of matrices consisting of matrices whose ij-th entry has the same sign. The talk gives some extensions of the classical theory of signed matrices. Chemical reaction networks CRN have dynamics dx/dt =f(x) with the Jacobian of f often having a sign pattern. Our results will be applied to CRN. (Received January 20, 2009)