1030-52-422   **John McDonald*** (`jmcdonald@cti.depaul.edu`), DePaul University, School of Computer
Science, Telecommunication and Information Systems, 243 S. Wabash Avenue, Chicago, IL 60604.
The Newton Polytope Construction for Systems of Equations.

This talk will explore an extension of the Newton Polytope construction for building fractional power series expansions to systems of algebraic equations. The method relies on the Minkowski sum of the Newton Polytopes of the equations in the system and serves as one of the motivating examples for Mixed Fiber Polytopes. (Received August 08, 2007)