Linear Algebra Algorithms as Dynamical Systems

Abstract:
In this talk we will review the paper "Linear Algebra Algorithms as Dynamical Systems" by Moody T. Chu. Many iterative methods in numerical linear algebra can be re-interpreted from a dynamical systems viewpoint. This vantage point can provide new insight into old algorithms and potentially guide the construction of new methods. In addition to some numerical demonstrations, we will ponder what impact structure-preserving algorithms can have on the field of numerical linear algebra.