

Wednesday, November 28., 2007

Root Hall A186, ISU

12:00 p.m., noon

Professor Allen Broughton

Rose-Hulman Institute of Technology

THE BARYCENTRE OF THE NUMERICAL RANGE OF AN OPERATOR

The numerical range of an operator A on a complex vector space is the set of all scalar products $\langle AX, X \rangle$ as X varies in the unit ball.

It is a compact convex set in the complex plane. Geometrical properties of the numerical range imply certain properties about the operator and vice versa. We will present some basic properties and examples of numerical ranges and then focus discussion on the barycentre of the numerical range.

Most of the talk will require nothing more than linear algebra.

For more information write to jajcay@cayley.indstate.edu
or visit <http://marilyn.indstate.edu/jajcay/seminar.html>