

Department of Applied and Computational Mathematics and Statistics Colloquium



Charles Wampler

University of Notre Dame

Numerical Algebraic Geometry and Kinematics

Numerical algebraic geometry (NAG) uses floating-point numerics to represent and manipulate algebraic sets. Having recently joined the ACMS Department after nearly 4 decades in industrial R&D, the speaker will discuss how his contributions to the birth and continued development of NAG has been motivated by his interest in the kinematics of robots and mechanisms. Applications from kinematics, illustrated with physical models, will be used to demonstrate the basic concepts and present state of numerical algebraic geometry. The talk will end with a discussion of where work in the field is heading next.

Mon, March 24, 2025

3:45 – 4:45 PM

127 Hayes-Healy Center

Colloquium Tea – 3:15 PM in 101A Crowley Hall