

Department of Mathematics
University of Notre Dame

Katie Ellman-Aspnes & Roger Murray - University of Notre Dame

Mathematics Teaching Seminar

Date: Tuesday, February 28, 2023

Location: 125 Hayes-Healy Bldg

Time: 5:00 pm

Mock Lecture #1:

Title: T, N, B frame of a space curve

Speaker: Katie Ellman-Aspnes

University of Notre Dame

Abstract: The TNB frame is a collection of three orthogonal unit vectors (tangent, normal, and binormal) used to describe the motion of a space curve at any given point. The information provided by the tangent and normal vectors is analogous to that of the first and second derivatives in single variable calculus (i.e, they indicate the direction and curvature), while the binormal vector is orthogonal to both and therefore acts as the normal vector to the osculating plane, which can be thought of as a plane that "almost contains" the curve at a given point.

Mock Lecture #2

Speaker: Roger Murray

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