



Institut für
Angewandte Mathematik



Leibniz
Universität
Hannover

Oberseminar Analysis und Theoretische Physik

**Prof. Dr. Patrick Guidotti
(University of California Irvine)**

Connecting the Dots: The Geometry of Point Clouds

In this talk we shall describe a method for the computation (exact case) and estimation (noisy case) of important geometric quantities directly from point clouds that represent either an exact or a noisy sample of a manifold. The method extends known results of kernel based interpolation in the case of exact data and admits a statistical interpretation for noisy data.

**Dienstag, 04.03.2025, 15:00 Uhr, Raum c311
Hauptgebäude der Universität**

Veranstalter: Prof. Dr. Wolfram Bauer, Prof. Dr. Joachim Escher,
Prof. Dr. Johannes Lankeit, Prof. Dr. Elmar Schrohe, Prof. Dr. Alexander
Strohmaier, Prof. Dr. Christoph Walker, Dr. Alden Waters