

Mathematisches Kolloquium der Universität Wien

Montag, 23. Mai 2011

HS 2, UZA 2, Fakultät für Mathematik
Nordbergstrasse 15, 1090 Wien



17:00 David Mumford (Brown University):

(Fields Medal 1974, Shaw Prize 2006, AMS Steele Prize 2007, Wolf Prize 2008, US Medal of Science 2010)

*"Metrics on the space of N -tuples of points
with Applications to Chinese Cartography"*

Starting with a Sobolev metric on the diffeomorphism group, we induce a metric on the quotient space of N -tuples. This has a beautiful geodesic equation but surprisingly complex curvature properties. Mio has introduced a very effective way of numerically computing its geodesics. In addition to applications in the analysis of medical images, we will describe its use in the analysis of the Song Dynasty "Yu Ji Tu" (Map of the trails of Yu) and what this suggests about Chinese Science of the time.

Kontakt: Peter Michor, Fakultät für Mathematik.