## Oberseminar Geometrie und Topologie

Sommersemester 2018

## **Prof. Martin Guest**

(Waseda University Tokyo)

## The tt\*-Toda equations

19. Juni 2018 – 16.15 Uhr Seminarraum IGT, Raum 7.530, Pfaffenwaldring 57

Abstract: The tt\*-Toda equations are a special case of the Toda equations, harmonic map equations, and Hitchin equations. They first arose in physics as examples of the tt\* (topological-antitopological fusion) equations. Cecotti and Vafa made a number of conjectures regarding their solutions in a series of papers in the 1990's. In joint work with Alexander Its and Chang-Shou Lin, we have been able to confirm some of these predictions. The important information is contained in the monodromy data (Stokes matrices and connection matrices) of an associated meromorphic connection.

