

Dr. Ursula Ludwig (Freiburg)

The Witten complex for algebraic curves with cone-like singularities

ZEIT:

5.5.2009, 15:30 Uhr

ORT:

HU Berlin
Institut für Mathematik
Rudower Chaussee 25, Raum 1.410
Berlin-Adlershof

The Witten deformation is an analytical method proposed by Witten which, given a function

on a smooth compact Riemannian manifold, leads to a proof of the Morse inequalities. In this talk we generalise the Witten deformation to singular complex algebraic curves with cone-like singularities, and functions on which we call admissible Morse functions.

They are particular examples of stratified Morse functions in the sense of the theory developed by Goresky/MacPherson.

Kontakt:

Humboldt-Universität zu Berlin . Institut für Mathematik
SFB 647 . Unter den Linden 6 . 10099 Berlin
Tel. +49 30 2093 1804 . Fax. +49 30 2093 2727
sfb647@math.hu-berlin.de