

Vorträge im FS Differentialgeometrie

TIME:

30 Nov 2009 - 14 Dec 2009

LOCATION:

University of Potsdam, Am Neuen Palais 10, House 8, Room 0.58

PROGRAM:

30 Nov 2009

15:15 **Prof. Andreas Juhl**

Conformally covariant differential operators I

In a series of 3 lectures we will discuss recent developments around conformally invariant differential operators and Branson's Q-curvature. In the first lecture, we plan to cover the following topics:

* Conformal geometry and the ambient metric construction

- * Yamabe and Paneitz operator and their role in geometric analysis
- * GJMS-operators and their relation to scattering theory
- 7 Dec 2009

15:15 **Prof. Andreas Juhl**

Conformally covariant differential operators II

Second lecture. We will cover the following topics:

* Branson's Q-curvature: basic properties, its role in geometric analysis

* Q-curvature and scattering theory

* holographic formula and its connection with AdS/CFT

14 Dec 2009

15:15 **Prof. Andreas Juhl**

Conformally covariant differential operators III

Third lecture in this series. We will cover the following topics:

* Conformally covariant differential operators associated to submanifolds

* Residue families: definition and basic properties

* Recursive structure of GJMS-operators and Q-curvatures