



Vorträge im FS Differentialgeometrie

ZEIT:

30.11.2009 - 14.12.2009

ORT:

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

PROGRAMM:

30.11.2009

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

7.12.2009

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

Kontakt:

Humboldt-Universität zu Berlin . Institut für Mathematik
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- * Q-curvature and scattering theory
- * holographic formula and its connection with AdS/CFT

14.12.2009

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

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