



Vorträge im FS Differentialgeometrie

ZEIT:

29.11.2009 - 13.12.2009

ORT:

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

PROGRAMM:**29.11.2009**

14:15 **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

6.12.2009

14:15 **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
SFB 647 . Unter den Linden 6 . 10099 Berlin
Tel. +49 30 2093 1804 . Fax. +49 30 2093 2727
sfb647@math.hu-berlin.de

www.raumzeitmaterie.de

- * Q-curvature and scattering theory
- * holographic formula and its connection with AdS/CFT

13.12.2009

14:15 **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

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

www.raumzeitmaterie.de