



## 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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