



Leibniz  
Universität  
Hannover

Oberseminar  
Analysis und Theoretische Physik

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# Equivariant indices of Dirac operators on noncompact manifolds

For a compact Lie group acting on a compact Spin-c manifolds, one has the equivariant index of the associated Spin-c Dirac operator. Last year, Paradan and Vergne proved that this index decomposes into irreducible representations according to the "quantisation commutes with reduction" principle. This principle originally came from physics, where it relates the ways symmetry works in classical and quantum mechanics. But since the result by Paradan and Vergne, we know it is a more general property of Spin-c Dirac operators, which relates representation theory to geometry. This talk is about equivariant indices of Dirac operators for noncompact groups and/or manifolds, especially in the context of the quantisation commutes with reduction principle. It includes joint work with Mathai Varghese and Yanli Song.

**Dienstag, 20.10.2015, 15:00h, Raum g005  
Hauptgebäude der Leibniz Universität**

Dazu laden herzlich ein:  
Prof. Dr. Wolfram Bauer  
Prof. Dr. Joachim Escher  
Prof. Dr. Olaf Lechtenfeld  
Prof. Dr. Elmar Schrohe  
Prof. Dr. Christoph Walker

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