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Leibniz
Universität
Hannover

Oberseminar Analysis und Theoretische Physik

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What drum does the Heisenberg calculus beat?

The spectrum of a (first order, self-adjoint) classical pseudo-differential operator is intricately related to the geometry of the bicharacteristic flow of its symbol. The bicharacteristic flow is for (for square-root of) Laplace operator is the geodesic flow and this provides a direct relation between spectral theory and geometry. In this talk we will provide a brief exposition to a theorem of Duistermaat-Guillemin and apply some of the ideas to Heisenberg calculus on a contact manifold. We present some simple examples to demonstrate the basic differences in the two calculi. (Note: This is work in progress and no definitive answers to the above question will be provided, however a secret conjecture about them might be illustrated.)

**Dienstag, 13.5.2014, 15:15h, Raum g005
Hauptgebäude der Leibniz Universität**

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