Oberseminar
Analysis und Theoretische Physik

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Disordered magnetic Schrödinger operators, twisted crossed products and index theory

Using the C*-algebraic approach to systems in condensed matter physics, we can associate a crossed product to a family of dis-ordered Schrödinger operators possibly twisted by a magnetic flux.

In this talk I will explain how semifinite index theory (in the non-compact setting) allows us to derive topological invariants for the crossed product algebra that can then be related back to the underlying physical system. Time permitting, I will also discuss how one extends these invariants to regions of dynamical localisation as well as applications to topological insulators with possible anti-linear symmetries.

Dienstag, 1.11.2016, 15:00 Uhr, Raum c311
Hauptgebäude der Leibniz Universität

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