Bounded H_∞-calculus for differential operators on conic manifolds with boundary

Joerg SEILER

Dipartimento di Matematica, Università di Torino, Italy, joerg.seiler@unito.it

We shall discuss the existence of a bounded H_∞-calculus for realizations (closed extensions) of differential operators on manifolds with conical singularities and with boundary, subject to differential boundary conditions. The existence is guaranteed by posing suitable conditions of parameter-ellipticity, the proof relies on techniques from pseudodifferential operators on singular manifolds.

Based on joint work with N. Roidos and E. Schrohe.

Keywords: Bounded H_∞-calculus, conic manifolds with boundary, parameter-dependent pseudodifferential operators.