PSEUDODIFFERENTIAL CALCULUS ON MANIFOLDS WITH SINGULAR POINTS

Bert-Wolfgang Schulze, Nikolai N. Tarkhanov ¹

Institut für Mathematik, Universität Postdam Postfach 60 15 53 14415 Postdam Germany

(Recieved: December 11, 1997) Abstract

In the pseudodifferential calculus on manifolds with singularities there appear operators in terms of Fourier and Mellin transforms. This gives rise to abstract Fourier-Laplace transforms. We describe pseudodifferential operators and Sobolev spaces with respect to such transforms. It is indicated how these techniques may be used to get an index formula on manifolds with one-point singularities.

 $\it Key\ words\ and\ phrases$: Fourier-Laplace transform, pseudodifferential operators, index.

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