Vector-valued pseudo-differential operators

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Abstract

In this talk, we will present results on vector-valued pseudo-differential operators, giving a survey on different approaches and applications, with particular reference to the contributions of Bert-Wolfgang Schulze. Namely, vector-valued pseudo-differential operators appear as a natural tool for the study of elliptic equations on manifolds with singularities, providing Fredholm conditions, index computation etc., as well clarified by Schulze in a series of papers and books. Recent results by L.Rodino in collaboration with T.Gramchev (Cagliari), S.Pilipovic (Novi Sad) and M.W.Wong (York) will be also presented.