

# SUFFICIENT CONDITIONS FOR LOCAL SOLVABILITY OF SOME DEGENERATE PARTIAL DIFFERENTIAL OPERATORS

SERENA FEDERICO

In this talk we will give sufficient conditions for the local solvability of a class of degenerate second order linear partial differential operators with smooth coefficients. The class under consideration, inspired by some generalizations of the Kannai operator, is characterized by the presence of a complex subprincipal symbol. By giving suitable conditions on the subprincipal part and using the technique of a priori estimates, we will show that the operators in the class are at least  $L^2$  to  $L^2$  locally solvable.