



## PhD Colloquium

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## The ∂-Neumann problem in several complex variables

In complex analysis, holomorphic functions may be studied as solutions of the Cauchy-Riemann equations. A powerful technique in this context is to consider the Dolbeault Laplacian, a second order elliptic operator, as an unbounded operator on a suitable  $L^2$  space. The analytical difficulties that arise in making this work on domains with boundary are known as the  $\overline{\partial}$ -Neumann problem. In this talk, I will first give an introduction to the general setup of the problem, and then focus on the question of what the spectrum of the Laplacian can tell us.

15. November,15:00-15:45Seminar Room 13

