## ANALYSIS SEMINAR

## Duality of Integral Operators in $L^p$ -spaces

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**Abstract:** A classical result in functional analysis that the dual of the compact operators on an Hilbert space are the so-called trace class operators and the dual of the trace class operators (i.e. the second dual of the compact operators) is the space of all bounded operators on the Hilbert space. In this talk we will discuss two descriptions of the space of regular integral operators on  $L^p$ -spaces. One of these descriptions will provide an order theoretic analog of the above mentioned result for the integral operators on  $L^p$ -spaces.