

# COLLOQUIUM

MATH SIUC

**TITLE:** Introduction to Functorial Descent

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## **ABSTRACT:**

In the theory of automorphic representations, one of the main problems is to construct so-called liftings from representations of smaller matrix groups to those of larger matrix groups. Along with it comes a naturally complementary problem-- that of recognizing when a representation of a larger group is a lift, and recovering the representation it was lifted from. Functorial descent is a method, developed by Ginzburg, Rallis and Soudry in the classical groups, of approaching this problem. I will introduce the main ideas with examples from classical groups, and comment on some challenges and new phenomena which emerge in some recent attempts to push the theory into the exceptional groups.

Time: 3:00PM

Date: October 17, 2024

Place: Neckers 156

Reception immediately  
following in Math Library