



Department of Mathematics

COLLOQUIUM**Generalized doubling integrals and
the Langlands program****Dr. Yuanqing Cai**

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Abstract

The Langlands program has shaped a great deal of research in number theory, representation theory and other areas over the past half-century. In this talk, I will first explain the Langlands functoriality, which predicts maps between automorphic forms on different groups, dictated by a map of L -groups. I will then discuss my recent work with Friedberg, Ginzburg, and Kaplan on new integrals which can be used to study the tensor product L -functions of classical groups with general linear groups. These integrals generalize the doubling integrals of Piatetski-Shapiro and Rallis. I will also discuss some applications towards the Langlands functoriality.

Date: January 7, 2019 (Monday)**Time: 2:30 - 3:30pm****Venue: Room 210, Run Run Shaw Bldg., HKU**