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THE WEIZMANN INSTITUTE OF SCIENCE  
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE  
Algebraic Geometry and Representation Theory Seminar

on Wednesday, Feb 24, 2021 at 16:30

<https://weizmann.zoom.us/j/98304397425>  
Pierre-Henri Chaudouard Jussieu - Paris Rive Gauche

Recent progress on the Gan-Gross-Prasad conjecture for unitary groups

Abstract:

The talk is based on a joint work with Raphaël Beuzart-Plessis and Michał Zydor and on an ongoing joint work with Raphaël Beuzart-Plessis. The Gan-Gross-Prasad (GGP) conjecture relates the non-vanishing of some periods of cuspidal automorphic forms to that of central values of some related L-functions. In the case of unitary groups  $U(n) \times U(n+1)$ , a lot of progress have been made by a deep study of the Jacquet-Rallis trace formula. We will describe some recent results that can be obtained by a further analysis of the trace formula. Besides the "endoscopic cases" of the GGP conjecture, we get an extension to the periods of some Eisenstein series. We will also discuss applications we can get to the so-called Bessel periods of unitary groups.