



THE WEIZMANN INSTITUTE OF SCIENCE
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Algebraic Geometry and Representation Theory Seminar

on Wednesday, Apr 28, 2021
at 16:30

<https://weizmann.zoom.us/j/98304397425>

Dan Ciubotaru
Oxford University

Isolated unitary unramified representations and the Dirac inequality

Abstract:

I will present several applications of the Dirac inequality to the determination of unitary representations of p -adic groups and associated "spectral gaps". The method works particularly well in order to attach irreducible unitary representations to the large nilpotent orbits (e.g., regular, subregular) in the Langlands dual complex Lie algebra. These results can be viewed as a p -adic analogue of Salamanca-Riba's classification of irreducible unitary (\mathfrak{g}, K) -modules with strongly regular infinitesimal character.