

*The Workshop on
Model Theory of Valued Fields, October 1-8, 2018
School of Mathematics, IPM, Tehran*

Euler Products of p-adic Integrals

Jamshid Derakhshan

University of Oxford

UK

In the first two talks, I will talk about meromorphic continuation of Euler products of p-adic integrals beyond their abscissa of convergence and applications to various global zeta functions and Dirichlet series counting subgroups or conjugacy classes in algebraic groups over number fields and counting rational points of bounded height in homogeneous spaces.

In the third talk, I'll present joint work with August Macintyre on model theory of adèles, where results on model theory of p-adic fields have shown to have analogs for adèles (including of example quantifier elimination, measurability of definable sets, axiomatizations). I'll also discuss connections with Euler products, and challenging open problems.