

Oberwolfach Workshop

Non-Archimedean Geometry and Applications

Non-Archimedean Geometry is a central area of Geometry with particular relevance for Arakelov and Arithmetic Geometry. It has numerous applications to other fields. Among the central problems are the Langlands program, p -adic Hodge theory, and p -adic L-functions. An important framework to attack these questions are the non-archimedean analytic spaces introduced by Vladimir Berkovich, based on fundamental work of John Tate and others. Peter Scholze has introduced perfectoid spaces as a ground breaking new tool to attack deep problems in p -adic Hodge theory and representation theory. The workshop is centered around new developments in non-archimedean geometry and its applications to other fields. Its goal is to bring together researchers from different areas who develop or apply non-archimedean geometry and to stimulate their interaction.