

Oklahoma State University

Colloquium

Title

p-adic Geometry - A Grand Junction of Mathematics

Speaker: Serin Hong, Simons Laufer Math. Sci. Inst. and University of Michigan

Date: Jan 27, 2023

Time: 3:30 PM

Room: Virtual

Abstract: p -adic numbers are cousins of real numbers, defined via a completion of rational numbers. The field of p -adic numbers has both analytic and algebraic structures, given by the p -adic norm and the Galois group. As a consequence, geometry over p -adic numbers provides a tidy connection between various areas of mathematics, such as number theory, representation theory, and algebraic geometry. We give an overview of this connection, with emphasis on the context of the Langlands program, and discuss some recent developments.

