

DEPARTMENT OF MATHEMATICS Fall 2025 MATH Colloquium Series

Arithmetic Geometry: From Circles to Circular Counting

Dr. Adriana Salerno

I will show you a glimpse of one of the most exciting facets of research in modern number theory: **arithmetic geometry**. We will start with a (gentle) introduction to this area of research through some familiar examples. Then we will move on to a not so familiar example where we count solutions of equations $mod\ p$. I will end by answering two of the oldest and most mystifying questions in mathematics: how does this work fit into the bigger picture, and who cares?

a = 1

THURSDAY Oct. 9, 2025 4:00 PM SCi B 135