上智大学数学談話会のお知らせ

日時：2024年10月11日（金）17:30 – 18:30

場所：上智大学四谷キャンパス4号館3階4-398室

講演者：Andrei Seymour-Howell 氏（Bristol大学）

講演題目：Murmurations in number theory

講演要旨：In 2022 He, Lee, Oliver and Pozdnyakov made an interesting discovery, using techniques from machine learning, of a correlation between the root number of a family of elliptic curves and the coefficients of the associated L-functions. They named this phenomenon "murmurations of elliptic curves" due to its visual similarities to the phenomenon in birds. Subsequently, murmurations in many other families of objects of interest in number theory have been discovered, namely Dirichlet characters and modular forms. In this talk I will describe the background of this phenomenon and discuss some recent results in the area. This is joint work with Andrew R. Booker, Min Lee, David Lowry-Duda and Nina Zubrilina.