## 上智大学数学談話会のお知らせ

日時: 2022年6月24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

(Zoom によるオンライン配信あり)

講演者:齋藤 耕太 氏(筑波大学)

講演題目: Linear Diophantine equations on certain sparse sets

講演要旨: Finding linear relations on dense sets has been investigated long ago. For example, Szemerédi revealed that any subset of positive integers with positive density contains arbitrarily long arithmetic progressions. Recently, this study reached remarkable developments like the Green-Tao theorem. However, it is still a remaining problem to find linear relations on sparse sets. Thus, in this talk, we will discuss this problem; the speaker will exhibit results on linear relations over certain sparse sets such as Piatetski-Shapiro sequences. If time permits, the speaker will further talk about our recent work on perfect Euler bricks. These researches are joint work with Yuuya Yoshida, Toshiki Matsusaka, and Yuya Kanado, respectively.