2017年度 第十回 数理科学 談話会のお知らせ

以下の予定で「2017年度 第十回 数理科学 談話会」を開催致します。

日時：2018年2月1日（木）17:40–18:40
場所：弘前大学理工学部2号館 10階 共通演習室

講演者：Mumtaz Hussain氏 (La Trobe University, オーストラリア)

題目: Metrical theory for the set of Dirichlet non-improvable numbers
概要: Let $\psi : \mathbb{R}_+ \to \mathbb{R}_+$ be a non-increasing function. A real number x is said to be ψ-Dirichlet improvable if it admits an improvement to Dirichlet's theorem, that is if the system

$$|qx - p| < \psi(t) \quad \text{and} \quad |q| < t$$

has a non-trivial integer solution for all large enough t. In this talk, I will explain that the Hausdorff measure of the set of ψ-Dirichlet non-improvable numbers obeys a zero-infinity law for a large class of dimension functions.

Together with the Lebesgue measure-theoretic results established by Kleinbock and Wadleigh (2016), our results contribute to building a complete metric theory for the set of Dirichlet non-improvable numbers.
(This is a joint work with D. Kleinbock, N. Wadleigh and B-W. Wang)