## Séminaire de théorie des nombres

Le 23 janvier 2023 à 14h (PRG)

## Exact approximation in metric measure spaces

## Exposé de Prasuna Bandi (IHES)

**Résumé :** In Diophantine approximation, it is a classical problem to determine the size of the sets related to  $\psi$  approximable set for a given non-increasing function  $\psi$ . The exact  $\psi$  approximable set is the set of numbers that are  $\psi$  approximable and not approximable to a better order than  $\psi$ . Bugeaud determined the Hausdorff dimension of the exact  $\psi$  approximable set answering a question posed by Beresnevich, Dickinson, and Velani. In this talk, I will present the results on this exact approximation problem in general metric measure spaces satisfying certain conditions. This is joint work with Anish Ghosh and Debanjan Nandi.