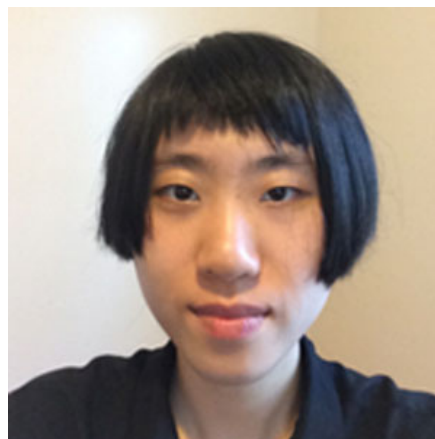


MODEL THEORY SEMINAR

Guest Speaker: Yayi Fu
University of Notre Dame



Date: Tuesday, April 11, 2023

Time: 10:30 AM

Location: 125 Hayes-Healy Hall

Zoom URL: NA

Lecture Title:

Generalization of coherence theorem on algebraically closed fields of characteristic zero

Abstract

Bakker, Brunebarbe, Tsimerman showed that the definable structure sheaf $\mathcal{O}_{\mathbb{C}^n}$ of \mathbb{C}^n is a coherent $\mathcal{O}_{\mathbb{C}^n}$ -module as a sheaf on the site $\underline{\mathbb{C}^n}$, where the coverings are finite coverings by definable open sets. In general, let \mathbb{K} be an algebraically closed field of characteristic zero. We give a more model theoretic proof of the coherence of $\mathcal{O}_{\mathbb{K}^n}$ as a sheaf of $\mathcal{O}_{\mathbb{K}^n}$ -module on the site $\underline{\mathbb{K}^n}$ using spectral topology on the type space $S_n(\mathbb{K})$.