

Many Levels of Infinities and Multidimensional van der Waerden's Theorem

Tuesday, 11 July 2023 14:30 (45 minutes)

There could be more than one elementary embedding between a model and its elementary extension. We develop a nonstandard analysis framework by iterating ultrapower constructions and present two different elementary embeddings at each stage. We hope that this framework gives powerful tools in applications. As a testing case we give a nonstandard proof of multidimensional van der Waerden's theorem by a single induction within this framework.

Presenter: JIN, Renling (College of Charleston)