DEFENSE OF THE DOCTORAL DISSERTATION

DEPARTMENT OF MATHEMATICS

"Erdős-Hajnal property in NIP theories"

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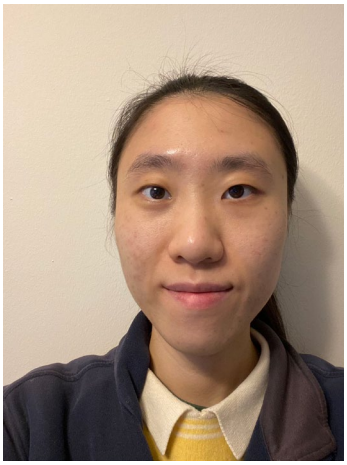
Tuesday, March 26, 2024
Time: 4:00 PM
Location: 310 DeBartolo Hall



Examination Committee:
Sergei Starchenko, Advisor
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Nick Ramsey
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Abstract:

We show a proof using model-theoretic technique and substitution that Erdős-Hajnal property holds for graphs with VC-dimension ≤ 2. We also show that the family of graphs with bounded VC-minimal complexity, a notion that arises from VC-minimal theory, has strong Erdős-Hajnal property. And we show a lemma about combs and pure pairs that I found when attempting to prove Erdős-Hajnal property for dp-minimal graphs.