## Department of Mathematics and Statistics Colloquium

## Ramsey's Theorem and Models of Peano Arithmetic

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Abstract: Ramsey's theorem is a well-known fundamental result in combinatorics. Ramsey's theorem states that one will find monochromatic subgraph in any edge coloring of a sufficiently large complete graph. In this talk we apply Ramseys theorem to construct indiscernible sequences for models of Peano Arithmetic. Then, we show how to use such sequences to code/decode inside of the automorphism group of a model of Peano Arithmetic.

Monday, October 23 at 3:50 in Roop 103

Refreshments at 3:30