



Online ISU Algebra Seminar

Date and Time: February 10, 2022, from noon to 12:50 pm.

Speaker: Sunil Chebolu, Ph.D. (ISU)

Title: **How many units can a commutative ring have?**

Abstract: Laszlo Fuchs posed the following problem in 1960, which remains open: classify the abelian groups occurring as the group of all units in a commutative ring. In this talk, I will provide an elementary solution to a simpler, related problem: find all cardinal numbers occurring as the cardinality of the group of all units in a commutative ring. As a by-product, we obtain a solution to Fuchs' problem for the class of finite abelian p -groups when p is an odd prime.

About Speaker: Dr. Chebolu was trained in mathematics and statistics in the Indian Statistical Institute in India. After earning his doctorate in mathematics at the University of Washington, he held a 3-year postdoctoral position at the University of Western Ontario Canada. Dr. Chebolu joined ISU in 2008. He has broad range of interests in mathematics and related areas including astronomy, music, games, and computing.

Zoom Meeting Information

Join Zoom Meeting

<https://illinoisstate.zoom.us/j/91671891930?pwd=T3Ziam4zWE5sOXdlNnRUV3NsbGdHdz09>

Meeting ID: 916 7189 1930

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