



# RUMA

Rutgers Undergraduate Mathematics Association

presents...

## A TOPOLOGICAL PROOF OF EUCLID'S THEOREM

A Lecture by Sangjun Ko

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### ABSTRACT:

Euclid's Theorem, which states that there are infinitely many primes, is a classic theorem whose proof is studied by every student who is beginning to learn about proofs. As an undergraduate, 2020 Abel Prize winner Hillel Furstenberg came up with a different proof which takes ideas from point-set topology. We will give a quick introduction to basic point-set topology and present Furstenberg's proof, and, if time permits, discuss some properties of the so-called "evenly spaced integer topology" as well as other similar constructions.

WEDNESDAY  
MARCH 23, 2022  
HILL 705 AT 7:30 PM

*\*Pizza and refreshments will be served*

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