

TMS Undergraduate Peer Talks (Wed 22 Jan 2025, CMS MR2)

Time	Title/Speaker	Description
16:05	From Finite to Infinite Random Graphs Ishan Nath	In this talk, I will introduce the Rado graph, a countable graph with surprising properties, and explore what it can reveal about finite random graphs.
16:25	Special Relativity in Olympiad Geometry Velian Velikov	I will present a way of reformulating certain types of Euclidean geometry problems through the lens of special relativity.
16:45	Picturing Exact Sequences Dylan Toh	Exact sequences represent information about maps of abelian groups and vector spaces. Following R. Vakil's picturebook, I will explain how to visualise them, and present a proof-by-picture.
17:05	Tea Break @ CMS Core	
17:25	Combinatorial Game Theory Joël Huber	In this talk, I define a combinatorial game, investigate patterns in the group of games, and look at a first theorem which completely classifies a subgroup of the games – and if there's enough time, we will play some games on the way.
17:45	Convexity and Beer Douglas Barnes	Is there a convex body in \mathbb{R}^3 such that every convex shape in \mathbb{R}^2 can be obtained by a plane cut?
18:05	Squier's Puzzle and Thompson's Group Henry Jaspars	In this talk, I will introduce an elegant problem of C. Squier and demonstrate its solution through a brief foray into R. Thompson's group F.
18:25+	Pizza @ CMS Core	