



SCMS Seminar

WHERE MACHINE INTELLIGENCE ENDS AND HUMAN CREATIVITY BEGINS

Speaker: Fan Zheng
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Time: Mon., Jul. 7th, 16:00-17:00

Venue: Room 102, SCMS

Abstract:

As artificial intelligence systems reach unprecedented capabilities in mathematical problem solving, a crucial question emerges: where does machine computation end and human creativity begin? This talk explores two cutting-edge case studies — sum-difference sets in combinatorial number theory and the equational theory of magmas to illuminate the contrasting strengths of AI and human mathematicians. While AI systems like AlphaEvolve excel at heuristic exploration over vast search spaces, human insight continues to lead in constructing deeper structural arguments and proofs. These examples reveal a promising frontier of collaboration, where the synergy between human understanding and machine power drives mathematical discovery forward.