Professor Paata Ivanisvili receives prestigious Simons Fellowship in Mathematics

The fellowship will support Ivanisvili's research into harmonic analysis and probability theory.

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Lucas Van Wyk Joel
UC Irvine Physical Sciences Communications

Paata plans to tackle research questions he's had on hold for a long time.

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UC Irvine

Professor Paata Ivanisvili of the UC Irvine Department of Mathematics was selected as a 2025 Simons Fellow in Mathematics. Thefellowship, funded by the Simons Foundation, goes to mathematicians and theoretical physicists with remarkable bodies of work, which for Ivanisvili includes research that focuses on the mathematical fields of analysis, probability, theoretical computer science as well as Boolean functions. "These functions are deceptively simple on the surface, but hide incredibly rich mathematical structure," said Ivanisvili. "Studying their complexity, how to learn or approximate them and how they behave under various transformations has led to deep connections with areas such as learning theory, quantum computing and high-dimensional geometry." As a Simons fellow, Ivanisvili will receive up to $125,000 in funding that will support him for nine months, allowing him to take time away from his usual teaching responsibilities so he can focus on new research questions. "Over the years, while working on specific research problems, I've accumulated a long list of new open questions that naturally emerged — I often jot them down and tell myself I'll return to them later," said Ivanisvili. "This fellowship gives me the time and flexibility to finally revisit these ideas. I plan to devote attention to several longstanding problems that I've had to postpone."

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