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Introduction to Mathematical Animation in Python with Manim

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Fri, 14 November 2025 | 12h00-12h30 SAST

Attend online

ABSTRACT

Manim (Mathematical Animation Engine) is an open-source Python library designed for creating high-quality, programmatically generated animations. It enables precise visualizations of mathematical, physical, and computational concepts, making it a valuable tool for both education and research communication. This presentation provides an introduction to Manim's core functionality, illustrating how it can be used to construct dynamic, reproducible visual content directly from code. In addition, the talk highlights the growing role of Manim in digital science communication, particularly through short-form media platforms such as TikTok and YouTube Shorts, where concise, visually engaging explanations can reach broad and diverse audiences.

BIOGRAPHY

Tristen Gwynn is a PhD student at Stellenbosch University in the Quantum Research Group under the supervision of Prof Francesco Petruccione. His research focuses on the role of chirality in radical pair mechanisms within the context of quantum biology. His broader interests include open quantum systems, spin dynamics, and the intersection of physics and biological function.



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