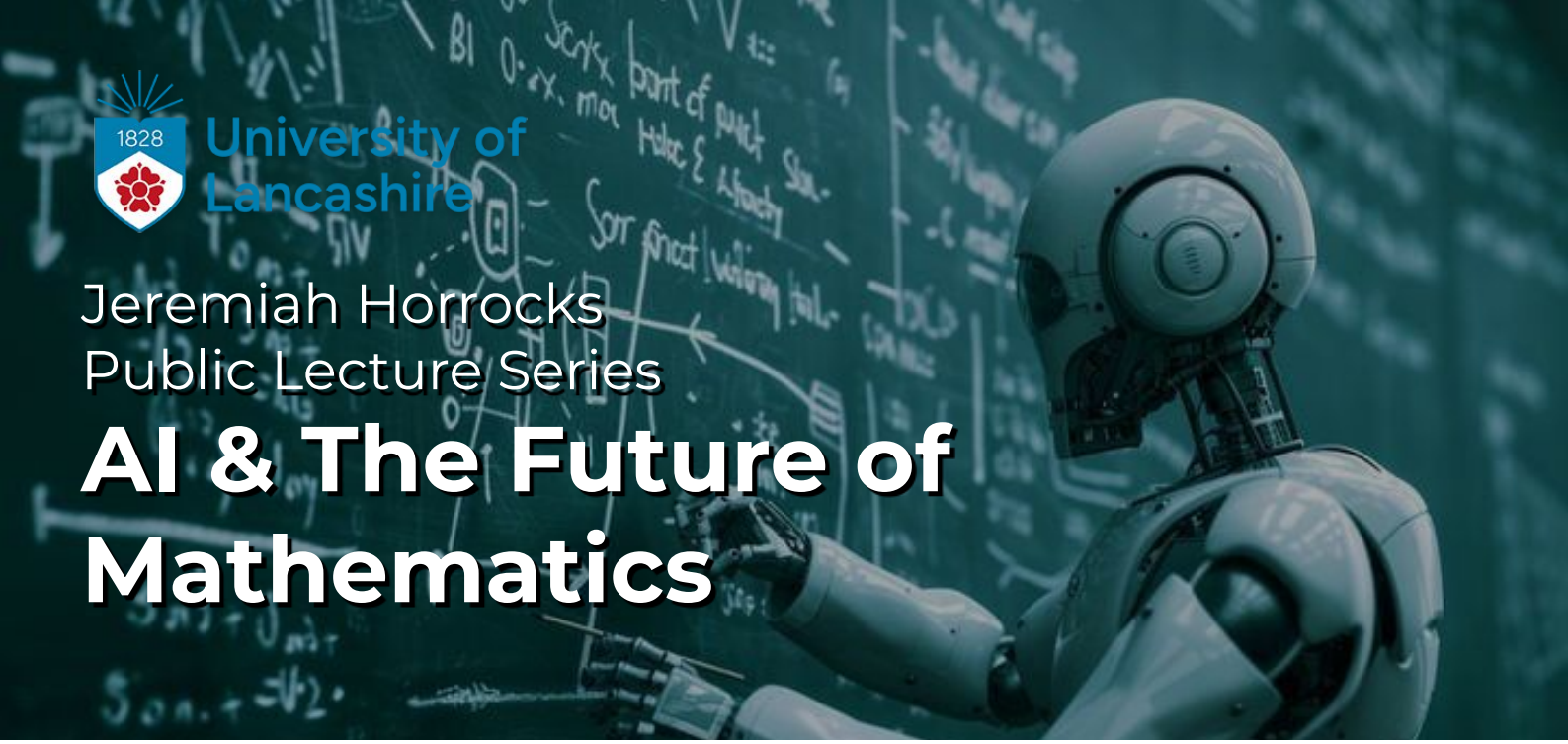


University of Lancashire

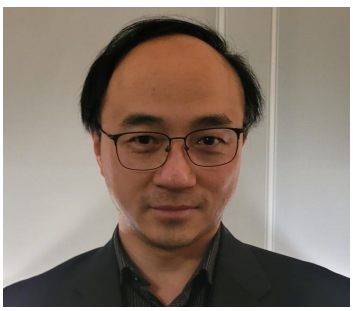
Jeremiah Horrocks
Public Lecture Series

AI & The Future of Mathematics

Thursday 19th March, 6:30pm (refreshments from 6pm)
Darwin Lecture Theatre, Preston Campus

We argue how AI can assist mathematics in three ways: theorem-proving, conjecture formulation, and language processing.
Inspired by initial experiments in mathematical physics in 2017, we summarize how this emerging field has grown over the past years, and show how various machine-learning algorithms can help with pattern detection across disciplines ranging from geometry to number theory.
At the heart of the programme is the question how does AI help with theoretical discovery, and the implications for the future of mathematics.

Prof. Yang-Hui He is a Fellow at the London Institute for Mathematical Sciences. He also holds honorary positions as Tutor in mathematics at Merton College, University of Oxford, Visiting Professor at City St George's, University of London and Chang-Jiang Chair at Nankai University. Yang read physics and mathematics at Princeton University (BA with Highest Honours), followed by



The Mathematics Tripos at Cambridge (Distinction), before earning his PhD in mathematical physics at MIT (NSF scholar and presidential award). After a postdoc at the University of Pennsylvania, he joined Oxford as the FitzJames Fellow and an STFC Advanced Fellow. Authoring more than 200 papers and several books, Yang works on the interface between geometry, number theory and string theory. He was a pioneer using AI to for mathematics in 2017 and wrote the first textbook on the subject (Springer, LNM, 2021). Yang is also a keen science communicator. His public talks have included a Friday Evening Discourse at the Royal Institution and the DIAS Statutory Public Lecture.

Scan to book your free place on Eventbrite

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