
Applications of Computer Algebra – ACA 2024

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Session on “*Machine Intelligence and Symbolic Computation*”

The AI Mathematician: From Physics, to Geometry, to Number Theory

Yang-Hui He^{1,2,3}

[hey@maths.ox.ac.uk]

¹ London Institute, Royal Institution, 21 Albemarle St, London W1S 4BS, UK

² Merton College, University of Oxford, OX14JD, UK

³ School of Physics, NanKai University, Tianjin, 300071, PR China

We present a number of recent experiments on how various standard machine-learning algorithms can help with pattern detection across disciplines ranging from algebraic geometry, to representation theory, to combinatorics, and to number theory. In particular, we focus on recent AI-assisted discovery of the Murmuration Phenomenon in Arithmetic.