

"What is... An Elliptic Curve?" From Bitcoin to Self-Driving Vehicles

by Emma Previato (Boston University)

Abstract: From the title article by Á. Lozano-Robledo and H.B. Daniels (AMS Notices, 2017) to the current "The Ubiquity of Elliptic Curves" by E.H. Goins (AMS Notices, 2019), what is the reason for 'The unreasonable effectiveness of elliptic curves'? This talk will illustrate the role of elliptic curves, and more generally Algebraic Geometry, in Mathematical Physics, Information Theory and Cryptography, and Machine Learning, presenting some of the speaker's results and open questions for future research.