

# How to Use Geometry to Get Rich Playing the Lottery\*

Jordan Ellenberg, Department of Mathematics,  
University of Wisconsin-Madison

For seven years, a group of students from the Massachusetts Institute of Technology exploited a loophole in the Massachusetts State Lottery's Cash WinFall to win game after game, eventually pocketing more than \$3 million. Jordan Ellenberg will talk about how they did it, why they got away with it, the mathematical notions of expected value and variance, and the surprising relationship of all this with projective geometry.

*\*Sadly, will not actually help you get rich playing the lottery.*

September 30, 2014 / 7:00 p.m.

2-650 Moos Tower • 515 Delaware St. SE • East Bank, University of Minnesota, Minneapolis

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Jordan Ellenberg holds a Ph.D. in math from Harvard University, as well as a master's degree in fiction writing from Johns Hopkins University. In 2004, he joined the faculty of the University of Wisconsin at Madison, where he is now the Vilas Distinguished Achievement Professor of Mathematics. His research centers on the fields of number theory and algebraic geometry. Ellenberg is the author of New York Times bestseller *How Not to Be Wrong*:

*The Power of Mathematical Thinking* and the novel *The Grasshopper King*. Both books will be available for purchase and signing at the lecture.

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