

Michigan Math Club

Thursday at 4pm in the Commons

Free Pizza and Pop



On twin primes and analytic number theory

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Abstract for 16 October

The twin prime conjecture - one of the most famous problems of analytic number theory - claims that there are infinitely many primes p such that $p+2$ is also prime. I will compare this conjecture to the similarly famous binary and ternary Goldbach problems, and talk about the history and recent progress in these problems. I will then outline the circle method solution to the ternary Goldbach problem for large numbers, discuss why this method does not work for the binary Goldbach problem or the twin prime conjecture, and finally show the main method involved in the recent surprising progress on the twin prime conjecture.

