

(19+17+13)-(11+7+5)<sup>th</sup> Vojtěch Jarník International Mathematical Competition - Plenary Lecture

# THE TERNARY GOLDBACH PROBLEM

Friday 8. 4. 2016

16:30 – 18:00

room M427

Chittussiho 10  
Slezská Ostrava



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## Abstract

The ternary Goldbach conjecture (1742) asserts that every odd number greater than 5 can be written as the sum of three prime numbers. Following the pioneering work of Hardy and Littlewood, Vinogradov proved (1937) that every odd number larger than a constant  $C$  satisfies the conjecture. In the years since then, there has been a succession of results reducing  $C$ , but only to levels much too high for a verification by computer up to  $C$  to be possible ( $C > 10^{1300}$ ). (Ramare and Tao solved the corresponding problems for six and five prime numbers instead of three.) My recent work proved the conjecture. We will go over the main ideas in the proof.