



UNIVERSITÀ  
DI TRENTO

Dipartimento di  
Matematica

# DOTTORATO



**Monday 18 July 2022 – at 10.00 am**

The seminar will take online, through the ZOOM platform.

To get the access codes please contact the secretary office

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### On the proof of the ternary Goldbach's conjecture through the Circle Method

**Abstract:**

Goldbach's conjecture is one of the most famous and difficult problems in Number Theory and in all mathematics. The binary (or strong) Goldbach's conjecture asserts that every even number greater than two can be written as a sum of two primes and it still remains an open problem. The ternary (or weak) Goldbach's conjecture, stating that every odd number greater than seven can be expressed as a sum of three odd primes, has been recently solved, in 2013, by H. Helfgott. The aim of this talk is to show how it is possible to convert this problem from an elementary point of view into a complex analysis framework and to present the main ideas behind the Circle Method, devised by Hardy, Littlewood and Ramanujan for the investigation of additive problems in Number Theory, which has been employed by Helfgott in the proof of the ternary Goldbach's conjecture.

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**CONTATTI**

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