



COLLOQUIUM DI MATEMATICA
Dipartimento di Matematica e Fisica, Università Roma Tre

BJORN POONEN

Tetrahedra and exponential diophantine equations



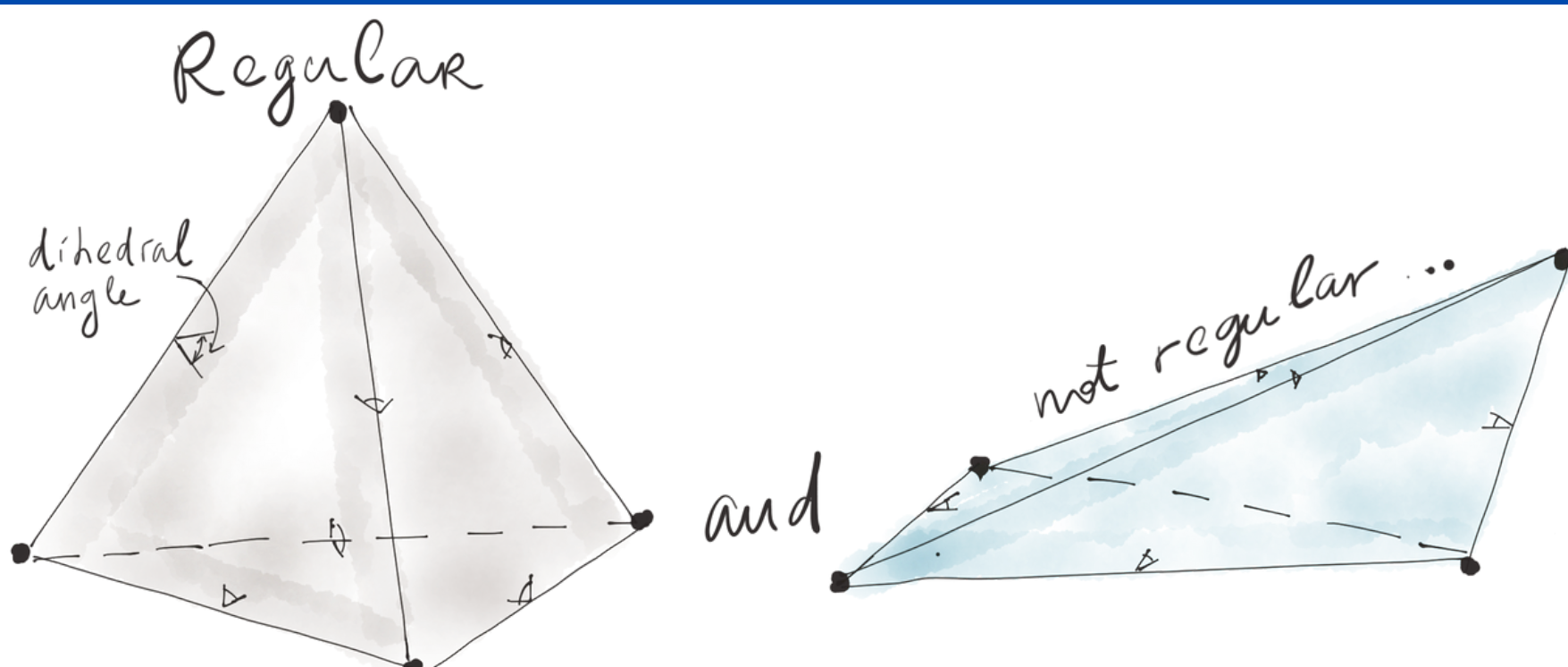
Bjorn Poonen (MIT)

**Mercoledì
26 Novembre
2025**

**Ore 16.00
AULA M1**
Blocco Aule S. Murialdo

ABSTRACT:

Dehn answered Hilbert's third problem around 1900 by showing that certain tetrahedra are not scissors-congruent to a cube. I will explain progress towards the problem of parametrizing all tetrahedra that are scissors-congruent to a cube. This is based on joint work with Kiran Kedlaya, Alexander Kolpakov, and Michael Rubinstein, and further work of two former MIT undergraduates, A. Anas Chentouf and Yihang Sun.



Drawing by A. Kolpakov



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