



ΠΑΝΕΠΙΣΤΗΜΙΟ ΙΩΑΝΝΙΝΩΝ

ΤΜΗΜΑ ΜΑΘΗΜΑΤΙΚΩΝ



Εβδομαδιαίο Σεμινάριο

## The face numbers of convex polytopes and simplicial spheres

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By definition, the  $i$ -th face number of a polytope is the number of its faces of dimension  $i$ . An interesting open problem is the complete characterization of all possible face numbers of convex polytopes of dimension  $d$ , where  $d > 3$  denotes an integer. Around 1980, Billera, Lee and Stanley solved the corresponding problem for the special classes of simple and simplicial convex polytopes, proving a conjecture of McMullen. In 2018, Adiprasito achieved the complete characterization of the face numbers of simplicial spheres. The aim of the talk is to give an introduction to those results and discuss further generalizations.

Τετάρτη 12 Μαΐου 2021, 17:00

Η ομιλία θα γίνει μέσω της πλατφόρμας ZOOM