

Department of Mathematics, BGU

Colloquium

On Tuesday, November ,15 2016

At 14:30 – 15:30

In Math 101-

Karim Adiprasito (Hebrew University of Jerusalem)

will talk about

Combinatorial Hodge theory

Abstract: I will discuss how Hodge theory, and positivity phenomena from algebraic geometry in general, can be used to resolve fundamental conjectures in combinatorics, including Rotas conjecture for log-concavity of Whitney numbers and beyond. I will also discuss how combinatorics can in turn be used to explain and prove such phenomena, such as the Hodge-Riemann relations for matroids.