Department of Mathematics, BGU

AGNT

On *Wednesday, June ,5 2024*

At *14:10 − 15:10*

In *101-*

Amnon Yekutieli (Ben Gurion University)

will talk about

Adic Completion, Derived Completion, Prisms, and Weak Proregularity

Abstract: The lecture will start with a few useful (and probably new!) theorems on adic completion of commutative rings and modules. Then I will discuss derived adic completion, in its two flavors: the idealistic and the sequential. The weak proregularity (WPR) condition on an ideal \a in a ring A, which is a subtle generalization of the noetherian condition on the ring A, is a necessary and sufficient condition for the two flavors of derived completion to agree. WPR occurs often in the context of perfectoid theory, and I will finish the talk with theorems relating WPR to prisms.

Typed notes available soon at the bottom of this web page:

https://sites.google.com/view/amyekut-math/home/lectures