Department of Mathematics, BGU

Jerusalem - Be'er Sheva Algebraic Geometry Seminar

On *Wednesday, December ,2 2020*

At *16:00 – 17:00*

In

Amnon Besser (Be'er Sheva)

will talk about

Coleman and Vologodsky integration, height pairings and rational points

Abstract: Coleman and Vologodsky integration are two related p-adic integration theories. In the first part of the talk I will explain the relation between the theories in some 1-dimensional cases discovered jointly with Sarah Zerbes, and I will conjecture on how this can be generalized, using in part the theory of averages on torsors for unipotent groups developed by Amnon Yekutieli.

In the second part of the talk I will give a new development of the theory of p-adic heights on Abelian varieties, which is in progress with Jan Steffen Muller and Padmavathi Srinivasan. I will explain how the Vologodsky theory gives us a way of computing local contribution to the pairing at each prime and not just at p. Time permitting I will explain the application to rational points, also in the joint work with Steffen and Padma.

Please Note the Unusual Time!