Department of Mathematics, BGU

AGNT

On *Wednesday, January ,8 2020*

At *15:00 − 16:15*

In *101-*

Ilya Tyomkin (BGU)

will talk about

Irreducibility problem for Severi varieties

Abstract: Severi varieties parameterize reduced irreducible curves of given geometric genus in a given linear system on an algebraic surface. The first irreducibility result for Severi varieties was established in ,1986 and it is due to Harris, who considered the classical case of planar curves in characteristic zero. Few more irreducibility results have been obtained since then, but none of the known approaches is applicable in positive characteristic. In my talk, I will discuss the history and the state of the art in the irreducibility problem, and will also announce new results obtained in a joint work with Karl Christ and Xiang He.