Department of Mathematics, BGU

AGNT

On *Wednesday, June ,26 2024*

At *14:10 − 15:10*

In *101-*

Michael Barash (Ben Gurion University)

will talk about

Irreducible components of Severi varieties on toric surfaces

Abstract: In this talk, I will discuss the irreducibility problem of Severi varieties on toric surfaces. The classical Severi varieties were introduced by Severi almost 100 years ago in the context of Severi's attempt to provide an algebraic treatment of the irreducibility problem of the moduli spaces of curves. Although, the irreducibility of the moduli spaces was achieved algebraically by Deligne and Mumford in 1969 using completely dffierent techniques, Severi varieties remained in the focus of study of many algebraic geometers including Harris, Fulton, Zariski and others.

In this talk I will present the main result of my M.Sc. Thesis providing a complete description of the irreducible components of the genus-one Severi varieties on toric surfaces.

This work was done under the supervision of Professor Ilya Tyomkin.