## Brownsville Seminar



## Atiyah-Hirzebruch formula for fourdimensional manifolds

Speaker: Oleg Musin

## **Abstract:**

In a joint paper by two outstanding mathematicians of the twentieth century, a formula (algebraic rational functional equation) for the weights of a circle action on a manifold was obtained. This formula relies on quite complex mathematics, in particular, the famous Atiyah-Singer index theorem was used.

In my presentation, I am not going to discuss the mathematics behind this formula. My talk will be quite simple, I will discuss the Atiyah-Hirzebruch formula and show how relationships between weights and a classification of actions of a circle on 4-manifolds can be obtained.

!Coffee and Cookies will be Provided!

Date: September 22<sup>nd</sup>, 2023

Time: 1:30 - 2:30 PM CT

In Person: BLHSB 1.316

Zoom Link: https://utrgv.zoom.us/j/83585846705

For further information please contact Dr. Alexey Glazyrin via email at alexey.glazyrin@utrgv.edu.

More information about the seminar talks is available at the website https://www.utrgv.edu/math/news-events/seminars/brownsville/index.htm.