

The Trivial Notions Seminar Proudly Announces

Topology of hypersurface singularities

A talk by Atanas Atanasov

Abstract

Let $X \subset \mathbb{C}^n$ be a hypersurface for which $0 \in X$ is an isolated singular point. By looking at the behavior of X in a small ball around 0, we can associate several topological spaces which encode information about the singularity in interesting and unexpected ways. For example, if n = 2, intersecting X with a sufficiently small 3-sphere centered at 0, produces a link each of whose components is an iterated cable of torus knots. We will explicitly relate the slopes of these torus knots to the algebraic data of the singularity. As time permits, we will also discuss higher dimensions.

> Thursday April 5th, at 2:00 pm Science Center 310