



# TOPOLOGY SEMINAR

## “Exotic 4-Manifold Constructions via Pencils of Curves of Small Genus and Surgeries”

By

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**Abstract:** Exotic manifolds are smooth manifolds which are homeomorphic but not diffeomorphic to each other. Constructing exotic manifolds in dimension four has been an active research area in low dimensional and symplectic topology over the last 30 years. In this talk, we will first discuss major open problems and some recent progress in 4-manifolds theory. Then we will discuss our constructions of exotic 4-manifolds via pencils of complex curves of small genus and via symplectic and smooth surgeries. Some of our results that will be presented are joint with A. Akhmedov.

**Date:** 21 December 2020

**Time:** 13:40

**Place:** Zoom

To request the event link, please send a message to [cihan.okay@bilkent.edu.tr](mailto:cihan.okay@bilkent.edu.tr)