



# TOPOLOGY SEMINAR

## Homotopy limits as double colimits

By

**Redi Haderi**  
(Bilkent)

**Abstract:** Simplicial categories (that is, simplicial objects in  $\text{Cat}$ ) may be regarded as a double categorical structure. As a matter of fact they are a double categorical version of simplicially enriched categories. This way a variety of concepts from double category theory apply, in particular double colimits.

We will construct a simplicial category of simplicial sets as a main example. As an application we will sketch how certain homotopy colimits are actually double colimits. Time permitting we will also point out how our example realizes Lurie's prediction that inner fibrations are classified by maps into a "higher category of correspondences".

**Date:** April 13, 2020 Monday

**Time:** 13:40 – 14:40

\* To request the event link, please send a message to [matthew.gelvin@bilkent.edu.tr](mailto:matthew.gelvin@bilkent.edu.tr)