



# TOPOLOGY SEMINARS

## Simplicially enriched categories

By

**Redi Haderi**  
(Bilkent)

**Abstract:** We are used to form a category of spaces whose morphisms are homotopy classes of maps. This category is inadequate for a lot of constructions. Instead one would look for a structure that records homotopies, homotopies between homotopies, and so on. The periodic table of elements predicts this structure to be an infinity-category with all higher morphisms invertible. Categories enriched over simplicial sets serve this purpose and constitute a model for such infinity-categories. We will define their coherent nerve and provide a relationship with quasi-categories.

**Date:** March 18, 2019 Monday

**Time:** 13:40 – 14:40

**Place:** SA141 Mathematics Seminar Room

\* Tea and cookies will be served after the talk. All are most cordially invited.