TOPOLOGY SEMINAR

Model categories I - basic definitions

By

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Abstract: This talk aims to provide basic definitions of the theory model categories. We want to introduce the definition of a model category and its homotopy category. In particular, this will require a discussion of fibrations, cofibrations and weak equivalences, fibrant and cofibrant objects, cylinder and path objects. Then we will proceed to the notion of left and right homotopy and define the homotopy category of a model category. The theory will be explained using two examples: Quillen model structure on topological spaces and Quillen model structure on simplicial sets.

Date: Monday, March 13, 2023
Time: 13:30
Place: SA141 - Mathematics Seminar Room & ZOOM
To request the event link, please send a message to cihan.okay@bilkent.edu.tr