



# Analysis Seminar

## Least gradient problem via Optimal transport

By

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**Abstract:** In this talk, we consider the least gradient problem with Dirichlet condition on (a part of) the boundary. In 2D, we show that this problem is equivalent to an (import/export) optimal transport problem. Thanks to this equivalence, we show existence and uniqueness of a solution to the least gradient problem. Then, we study the regularity of this solution by studying the summability of the transport density in the corresponding equivalent optimal transport formulation.

**Date:** Monday, June 21, 2021

**Time:** 13:30-14:30, GMT+3.

**Place:** ZOOM

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