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*Least gradient problem via optimal transport*

In this talk, we consider the least gradient problem with Dirichlet condition imposed on (a part of) the boundary. In 2D, we show that this problem is equivalent to an optimal transport problem. Thanks to this equivalence, we show existence and uniqueness of a solution to the least gradient problem and then, we prove some regularity on this solution by studying the summability of the transport density in the corresponding equivalent optimal transport formulation.