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## Initial data for Airy kernel determinant solutions of the Korteweg-de Vries equation

*Wednesday, June 30, 2021 3:00 PM (40 minutes)*

Fredholm determinants associated to deformations of the Airy kernel characterize a specific solution of the Kardar-Parisi-Zhang equation, and the same determinants appear in models for finite temperature free fermions. These determinants belong to a class of solutions to the Korteweg-de Vries equation with singular initial data. I will discuss the initial data in detail, and I will explain the implications for the Kardar-Parisi-Zhang equation. The talk will be based on joint work (in progress) with Mattia Cafasso, Giulio Ruzza and Christophe Charlier.

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