Minimal graphs in $\mathbb{H}^2\times\mathbb{R}$

Magdalena Rodriguez

Laboratoire d'Analyse et Mathématiques Appliquées, University of Marne-la-Vallée, France

magdalena.rodriguez @univ-mlv.fr

Abstract

Following the ideas of Jenkins and Serrin, we solve the Dirichlet problem for minimal surfaces in $\mathbb{H}^2 \times \mathbb{R}$ on con-convex domains of the hiperbolic plane with possibly infinite boundary data. As a particular case, we obtain a minimal vertical graph in $\mathbb{H}^2 \times \mathbb{R}$ with non-zero flux.