ASYMPTOTIC ANALYSIS FOR THE VOLUME FLUX IN A MARANGONI FLOW OF A THIN RIVULET

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Abstract. In this paper we investigate the flow of a thin layer of a triangular section. The flow is driven by gravity and a surface tension gradient. This gradient implies a non-zero tangential stress boundary condition (Marangoni effect). We have estimated the volume flux of the fluid and in some particular situations we have estimated them asymptotic.