

**NUMERICAL MODEL FOR PREDICTING THE FLOW EXCURSION INSTABILITY IN
PARALLEL HEATED CHANNELS**

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ABSTRACT: In this work, a numerical model is developed to predict the flow excursion instability in vertical narrow and parallel uniformly heated channels. The system of the differential equations describing the single and the two phase flow regions of the system (drift flux model) is solved using an explicit finite difference scheme. A satisfactory agreement is observed and the prediction of the onset of flow instability at which the minimum point in the demand point curve occurs within 12 percent over the all range of experimental results.