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CELL SIZES AT THE ONSET OF OSCILLATORY CONVECTIVE INSTABILITY IN A LAYER OF LOW-PRANDTL-NUMBER FLUID SUBJECT TO ROTATION AND A VERTICAL MAGNETIC FIELD

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The computed theoretical predictions of cell sizes at the onset of direct and oscillatory instabilities when a rotating layer of mercury is heated from below and subjected to the influence of a vertical magnetic field are compared with the experimentally determined values of Nakagawa (1). The point of transition

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from oscillatory instability to direct instability which is manifested in a discontinuous change in the cell sizes is also investigated.

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