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**Onset of Three-Dimensional Thermal Convection in a Rectangular Cavity** MITSUAKI FUNAKOSHI, YOSHINARI FUKAZAWA, Graduate School of Informatics, Kyoto University — The onset of three-dimensional thermal convection of a fluid in a rectangular cavity is numerically studied, under the assumption that its all walls are rigid and of perfect thermal conductance with vertically linear temperature profile. The dependence of the critical Rayleigh number and the symmetry of the most unstable mode on the aspect ratios of the cavity is obtained.

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