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**Non-Oberbeck-Boussinesq effects on the boundary-layer thicknesses** FRANCISCO FONTENELE ARAUJO, University of Twente, SIEGFRIED GROSSMANN, University of Marburg, DETLEF LOHSE, University of Twente — A measure characterizing non-Oberbeck-Boussinesq effects in Rayleigh-Benard convection is the ratio  $\lambda_{bottom}/\lambda_{top}$  between the thicknesses of the boundary-layers formed at the thermal plates (bottom and top). In the present work, we discuss an extension of Prandtl-Pohlhausen theory accounting for height-dependent viscosities and thermal diffusivities.

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