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Abstract for an Invited Paper
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Nusselt and Reynolds numbers for turbulent convection at very large Rayleigh numbers¹

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This talk will present a brief review of available Nusselt- and Reynolds-number measurements relevant to the issue of the transition to the “ultimate” regime of turbulent Rayleigh-Benard convection discussed by Kraichnan. It will then examine the expected signature of such a transition in the dependence of the Nusselt number on the Rayleigh and Prandtl numbers. Finally it will discuss future prospects for new measurements at very large Rayleigh numbers that will be potentially relevant to the transition.

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