Turbulent Convection at High Rayleigh Numbers

I will summarize my perspective on the problem of turbulent convection at very high Rayleigh numbers, by drawing on the work in my own group and elsewhere, and by considering the entire range of experimental, theoretical and computational work available. I will dwell on questions that are still poorly understood. In particular, I will consider the problem of turbulent convection in the Sun, paying some attention to the helioseismology results, and by drawing on the paper in *Annu. Rev. Fluid Mech.* 48, 191 (2016).

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