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Rigorous and numerical upper bounds on heat transport in rapidly rotating Rayleigh Bénard convection JARED WHITEHEAD, BENJAMIN PACHEV, Brigham Young University — We present recent rigorous and numerical upper bounds on the heat transport for rapidly rotating Rayleigh-Bénard convection using the asymptotically derived non-hydrostatic quasi-geostrophic equations. We also discuss the challenges inherent to developing upper bounds in the presence of rapid rotation, and propose some novel approaches to the same.

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