

TRANSITION TO THE ULTIMATE REGIME IN A RADIATIVELY DRIVEN CONVECTION EXPERIMENT

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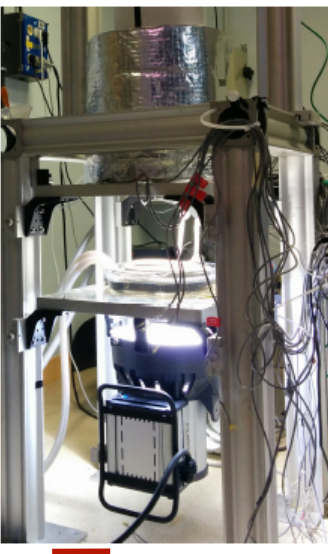
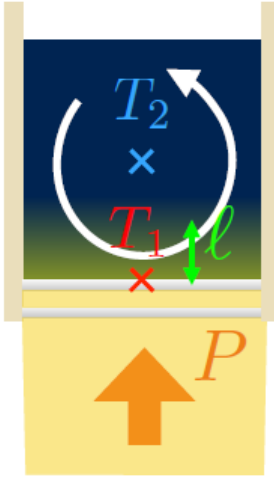
Two competing regimes:

Malkus Regime | Ultimate Regime

$$Nu \approx Ra^{1/3}$$

$$Nu \approx \sqrt{RaPr}$$

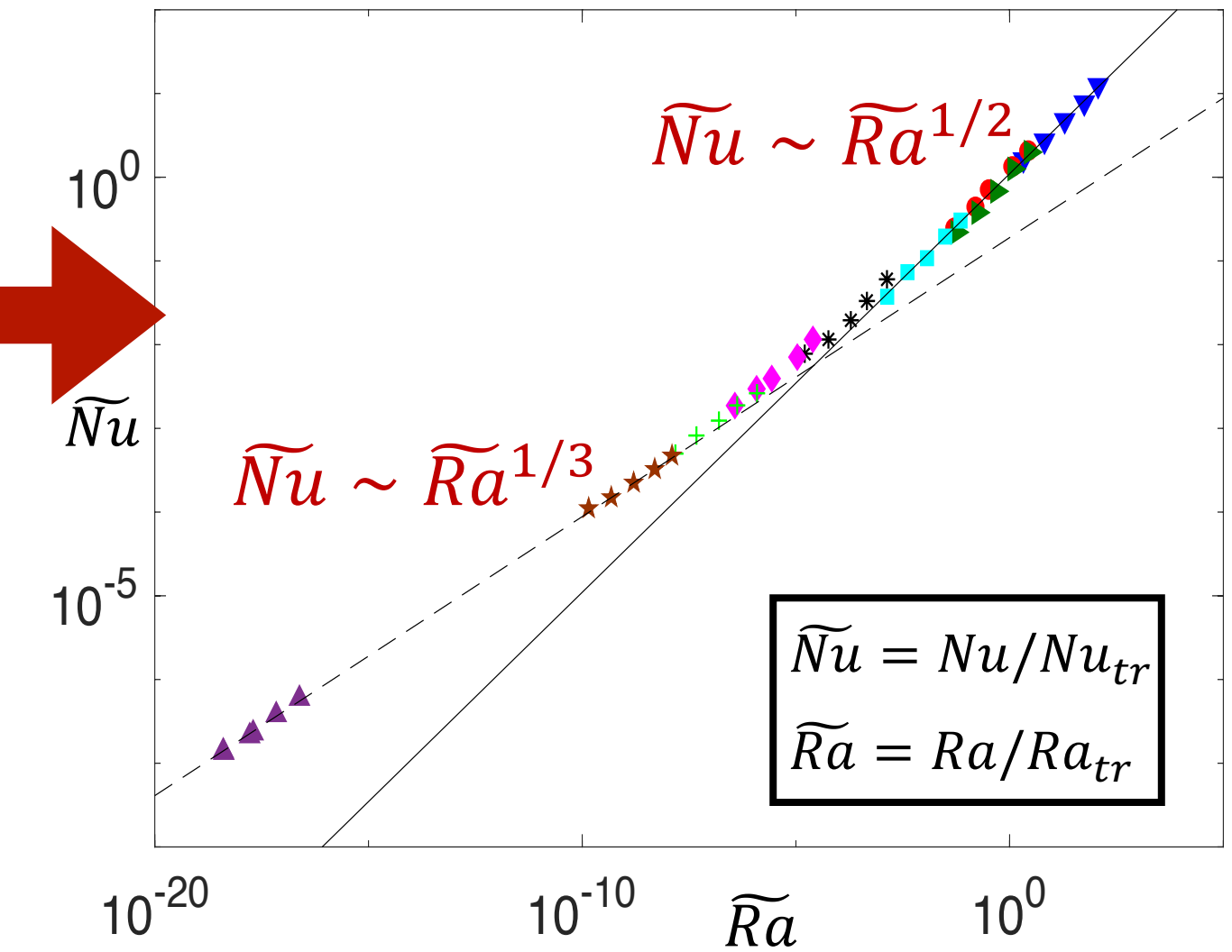
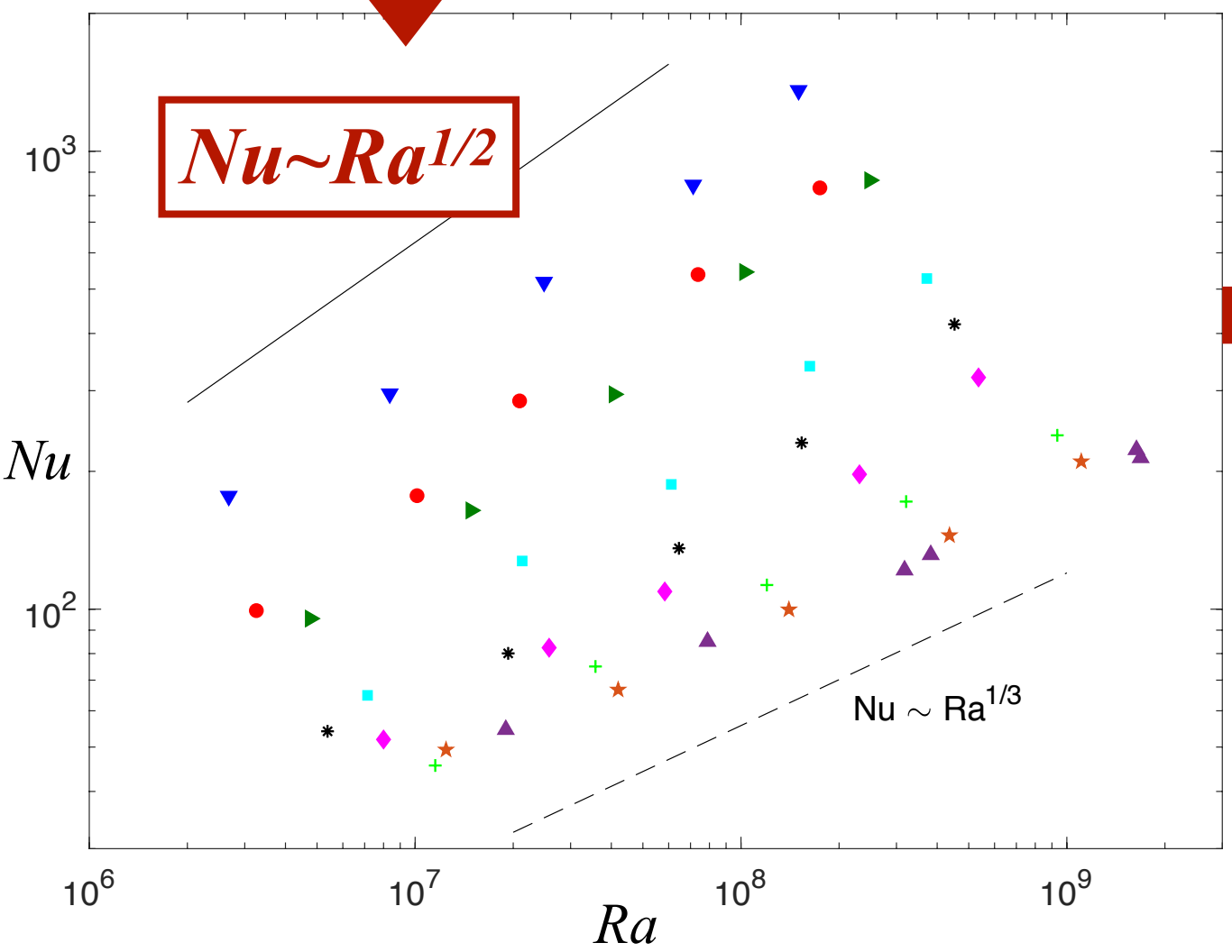
Our study aims at **bypassing** the boundary layers by using **Radiative Heating**



Radiative Heating

Clear observation
of the ultimate regime

Continuous transition
between the two regimes



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