

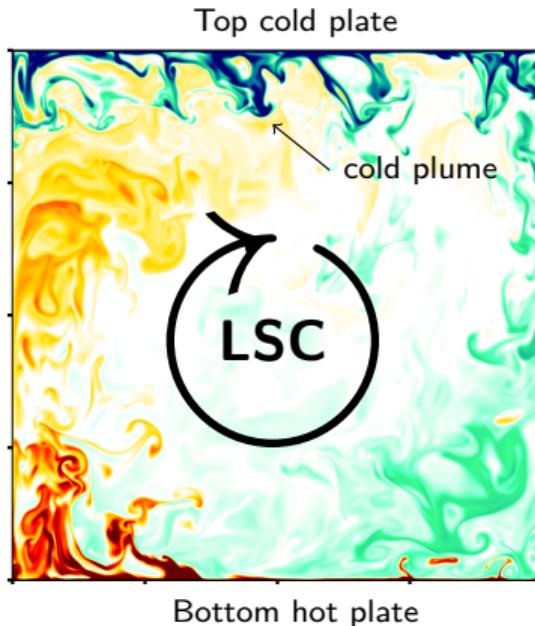
# Small coherent structures in rough turbulent convection

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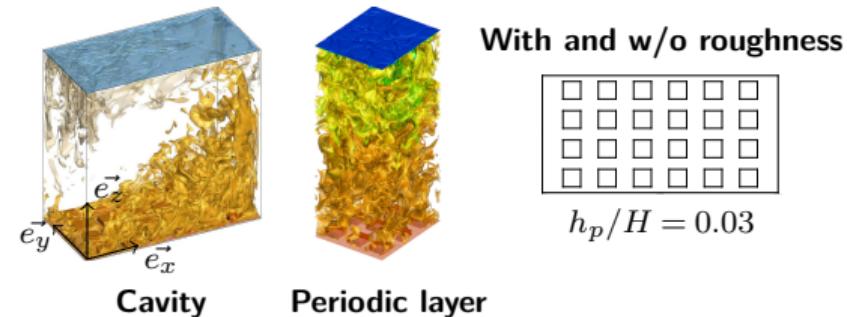
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## Rayleigh Bénard convection



Temperature snapshot ;  $Ra = 10^{10}$   $Pr = 4.4$  (water)

## 3D DNS of two physical configurations



## Objective

Investigate roughness  
and LSC effect on small  
coherent structures

Colors: periodic layer  
Lines: cavity

## Spatial FFT ( $T'$ )

