

How the Spatial Structure of Turbulent Mixing Determines Staircase Structure Fredy R. Ramirez¹ and Patrick H. Diamond¹

- pressure profile resembling a staircase.
- micro-barriers, which is essential for confinement!

- disparate time scales.

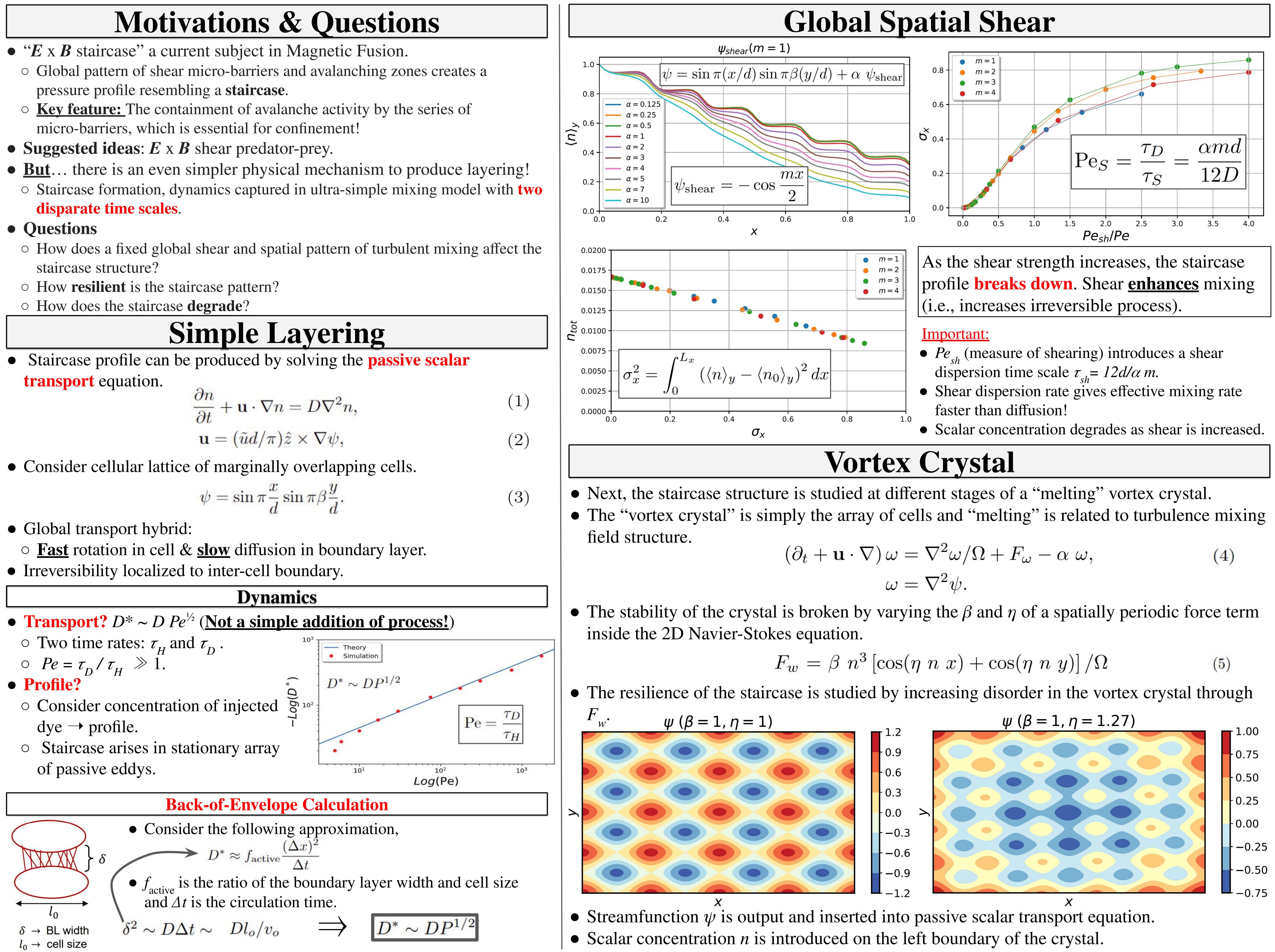
- staircase structure?

transport equation.

$$\begin{aligned} \frac{\partial n}{\partial t} + \mathbf{u} \cdot \nabla n &= D \nabla^2 n\\ \mathbf{u} &= (\tilde{u}d/\pi)\hat{z} \times \nabla \psi, \end{aligned}$$

$$\psi = \sin \pi \frac{x}{d} \sin \pi \beta \frac{y}{d}.$$

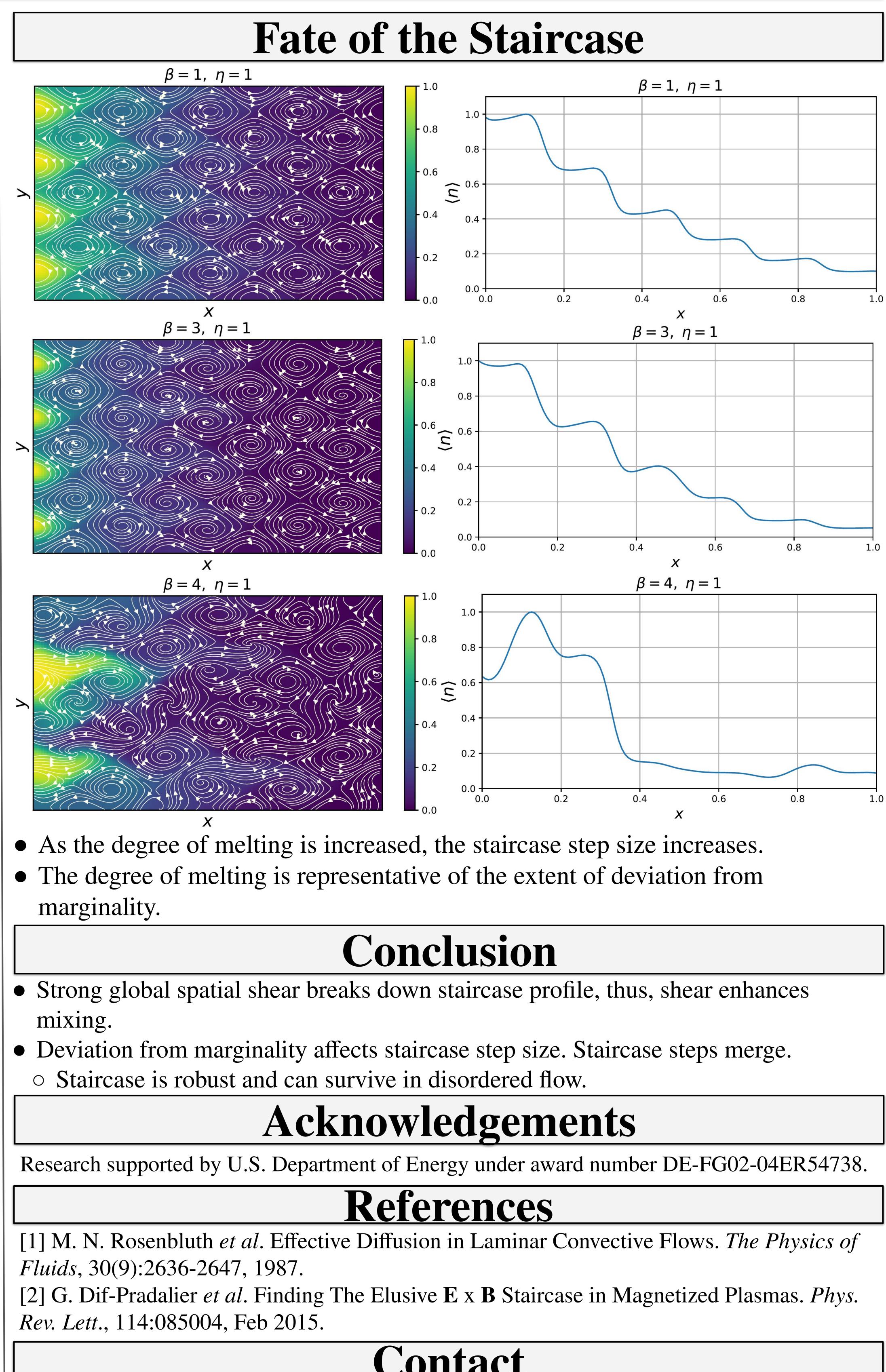
Dynamics



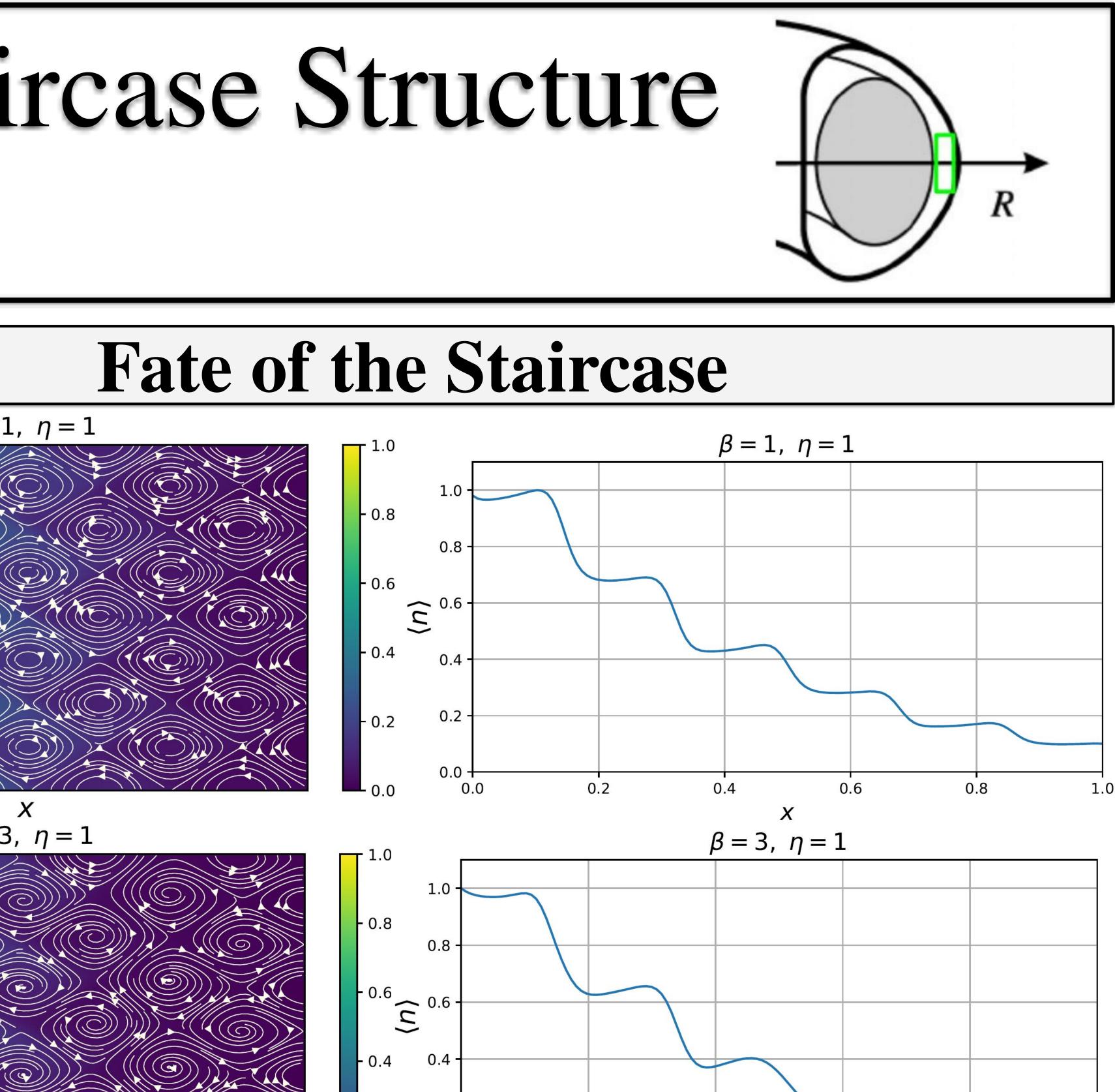
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$$^{2}\omega/\Omega + F_{\omega} - \alpha \ \omega,$$
 (4)
 $^{2}\psi.$

$$x) + \cos(\eta \ n \ y)] / \Omega \tag{5}$$



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Contact