

# Study of 2.5D Kraichnan-Kazantsev dynamos

Kannabiran SESHASAYANAN, Alexandros ALEXAKIS

Rencontre Du NonLinéaire

$$(u, v, w) = \mathbf{v}(x, y), \frac{\partial \mathbf{v}}{\partial z} = 0$$

Perturbation- $\mathbf{b} = \tilde{\mathbf{b}}(x, y) e^{ik_z z}$ .

Dimensionless numbers-  $Rm, k_z L$ . Growth rate -  $\gamma(Rm, k_z)$

Kazantsev-Kraichnan flow,

$$\langle u^i(\mathbf{x}, t) u^j(\mathbf{x}', t') \rangle = \delta(t - t') g^{ij}(\mathbf{x} - \mathbf{x}')$$

