

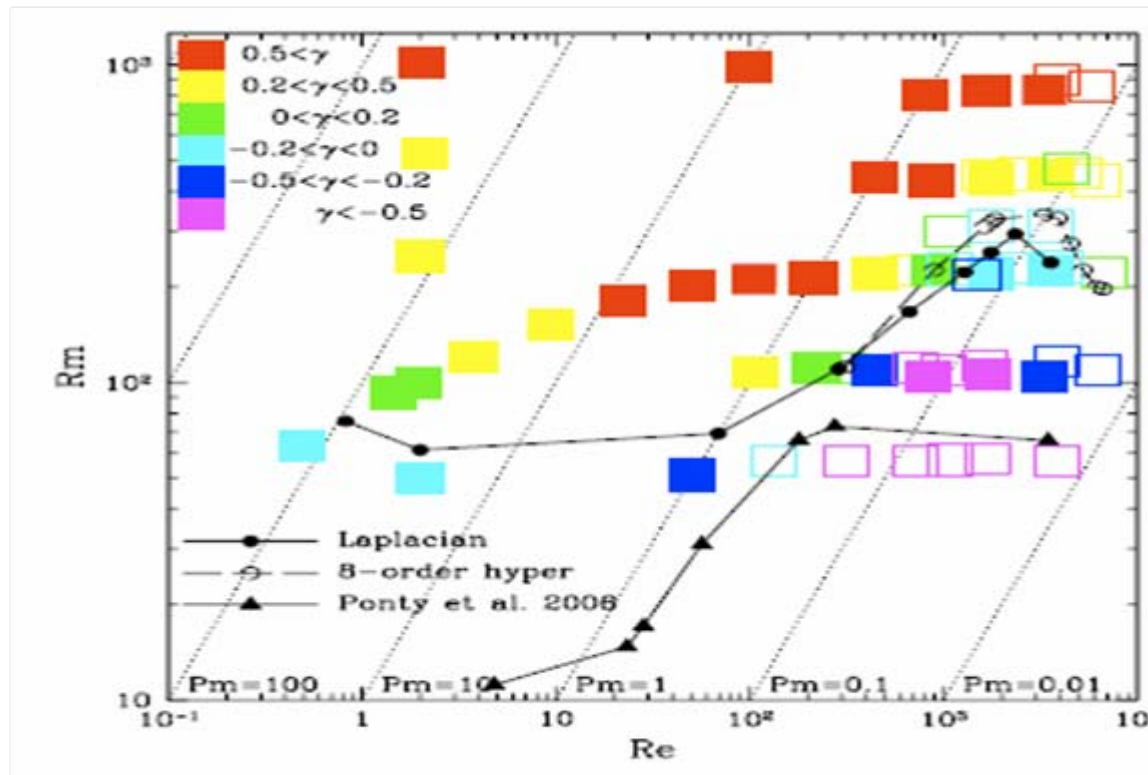
Low Pm quasigeostrophic dynamos

H-C Nataf

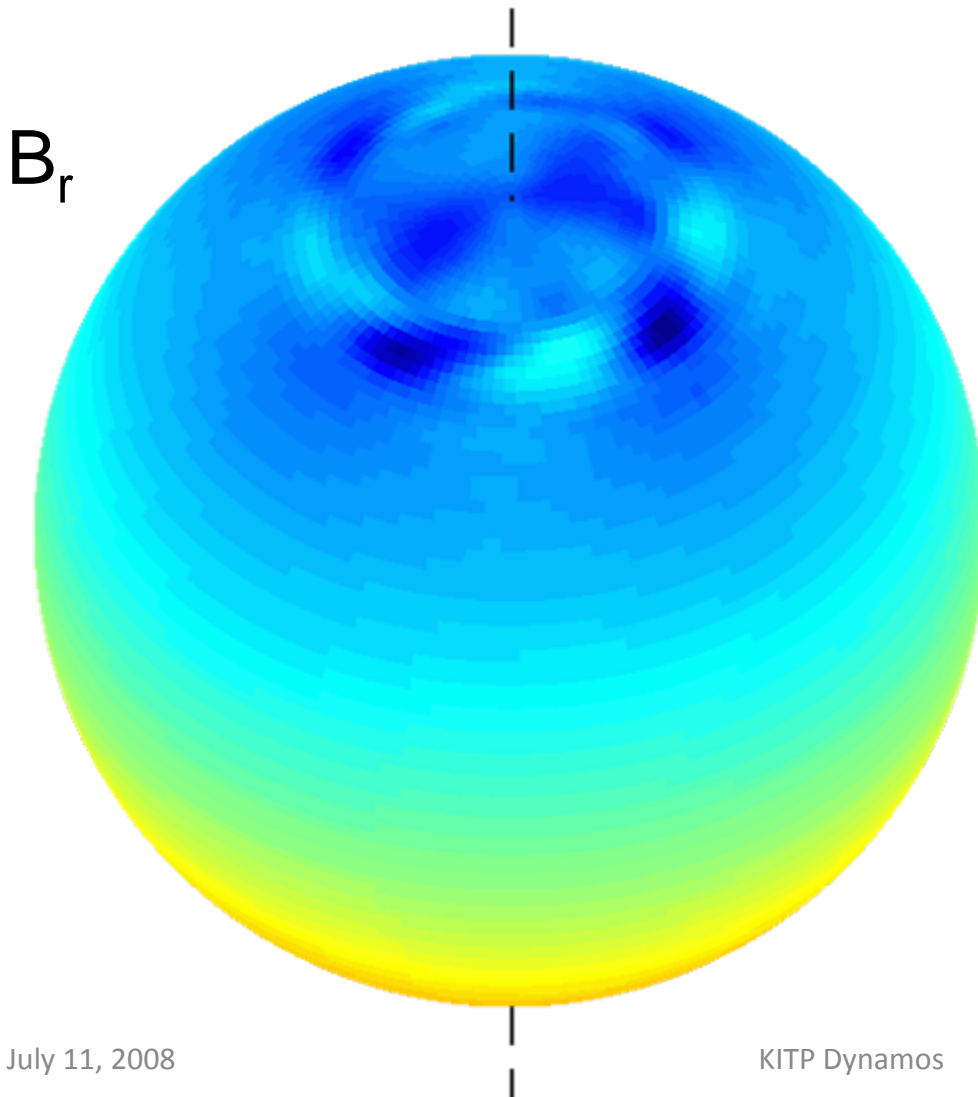
University of Grenoble and CNRS

Fluctuation and TG kinematic dynamos

Schekochihin et al, 2007



Hybrid QG spherical Couette kinematic dynamos



$$Re = \frac{ab\Delta\Omega}{\nu}$$

$$Pm = \nu/\eta$$

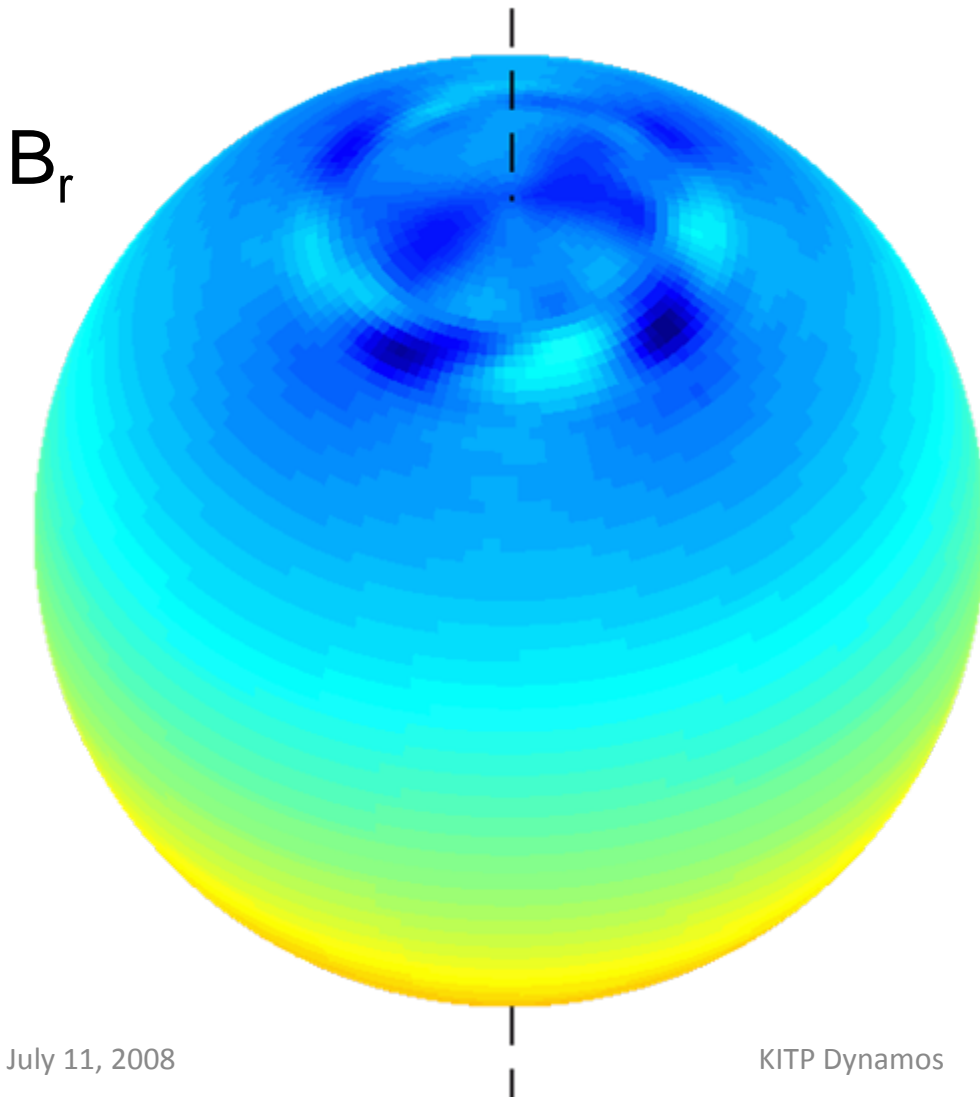
$$Rm = Re Pm$$

$$E = \frac{\nu}{\Omega a^2}$$

$$Ro = \frac{\Delta\Omega}{\Omega}$$

Schaeffer & Cardin, 2006

Hybrid QG spherical Couette kinematic dynamos



$$Re = 7 \cdot 10^5$$

$$Rm = 2100$$

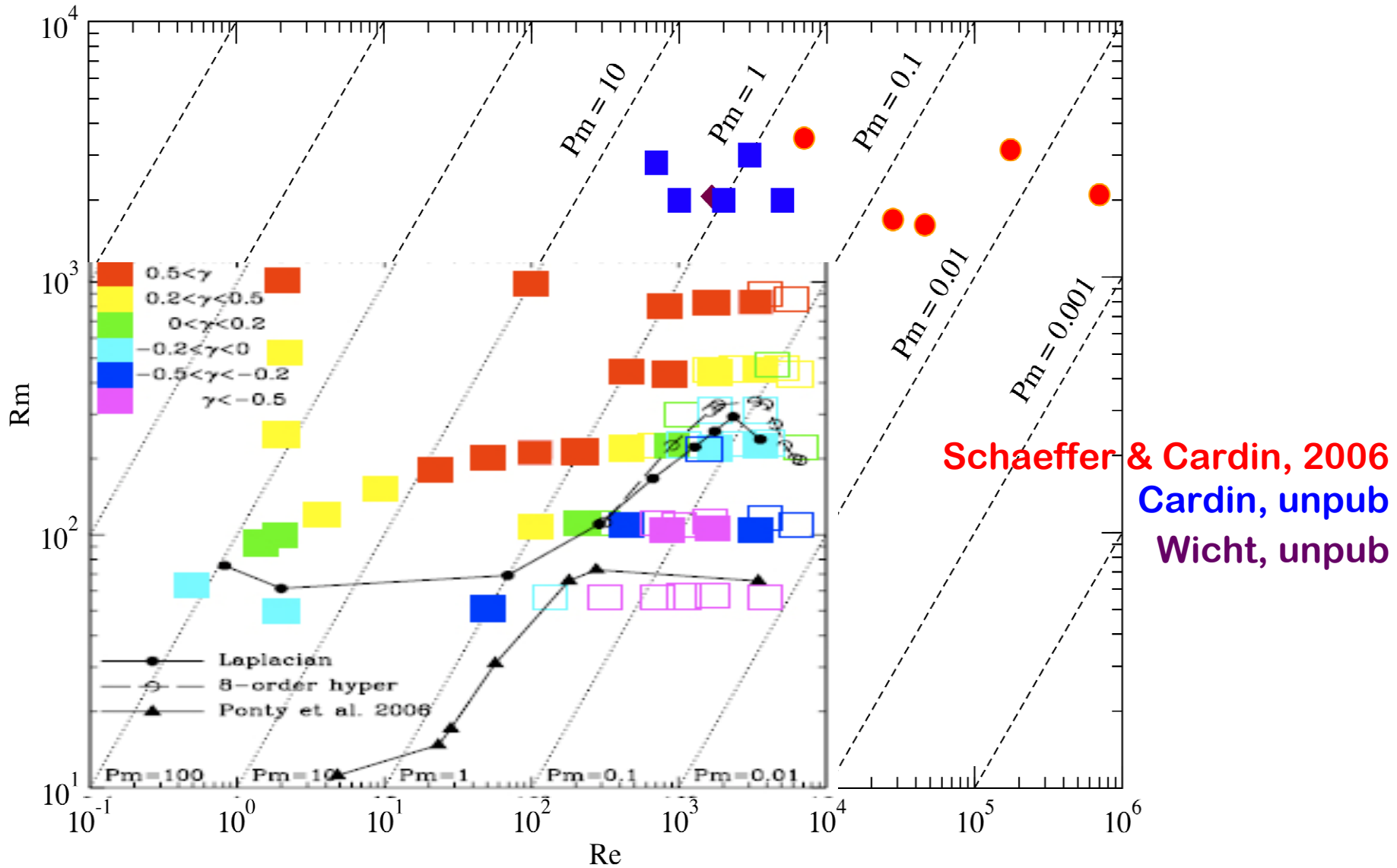
$$Pm = 0.003$$

$$E = 10^{-8}$$

$$Ro = -0.02$$

Schaeffer & Cardin, 2006

Dynamo onset for rotating spherical Couette (b/a=0.35)



Dynamo onset for rotating spherical Couette (b/a=0.35)

