Convection in a rapidly rotating spherical shell: Newton's method using implicit Coriolis
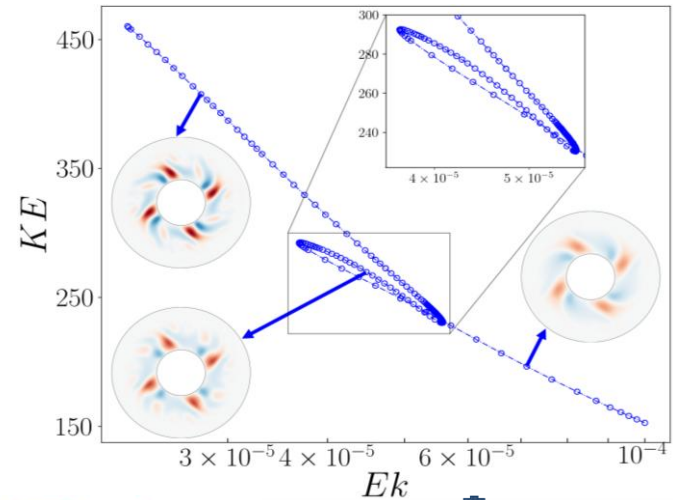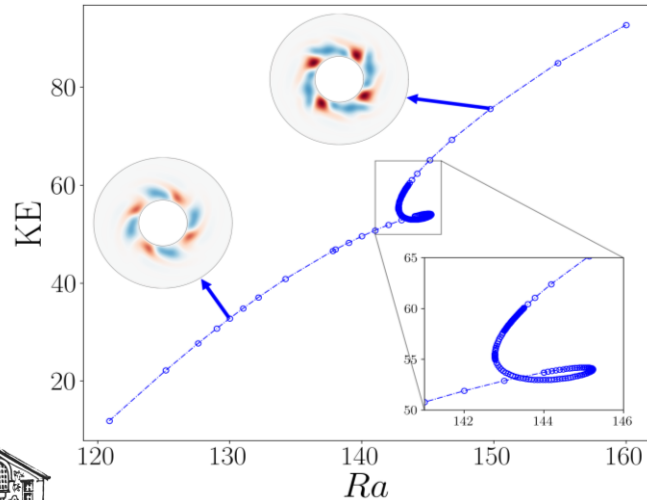
RENCONTRE DU NON-LINEAIRE 2025

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Solve the **Boussinesq equations** in a rapidly rotating spherical shell.

Coriolis term handled either **explicitly** or **implicitly**.

- Timestepper is adapted to follow **rotating wave branches** via Newton's method.

- **Branch continuation** is used to compare the performance of explicit vs. implicit Coriolis treatment.