The field line map approach for simulations of plasma edge/SOL turbulence

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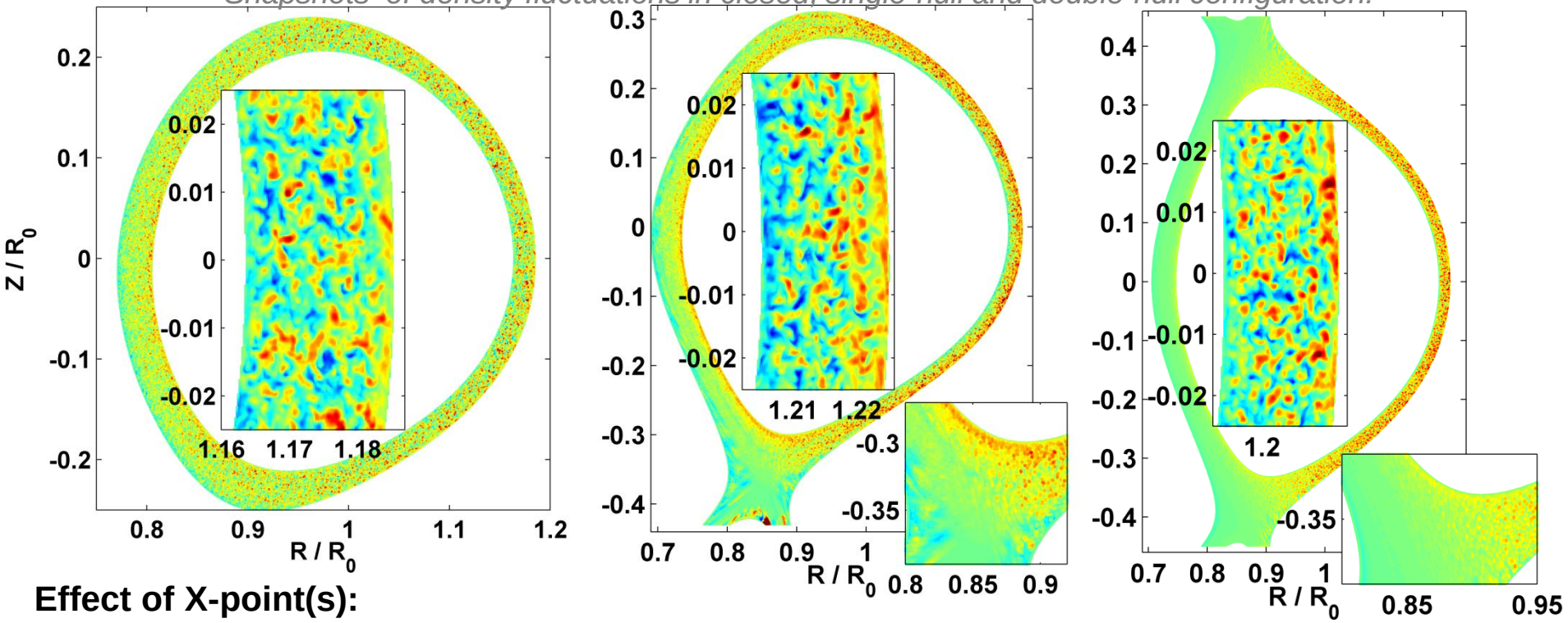
GRILLIX:

- Turbulence code **(3D)** based on flux-coordinate independent approach
- Treatment of separatrix and X-point(s) possible
- Hasegawa-Wakatani model for basic study of effects of geometry on turbulence

Snapshots of density fluctuations in closed, single-null and double-null configuration:



Effect of X-point(s):

- Parallel **disconnection** of field-aligned structures due to strong local magnetic shear
- Low field side (unfavourable curvature) disconnected from stabilizing high field side
- Supression of fluctuations on high field side especially in double-null configuration

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