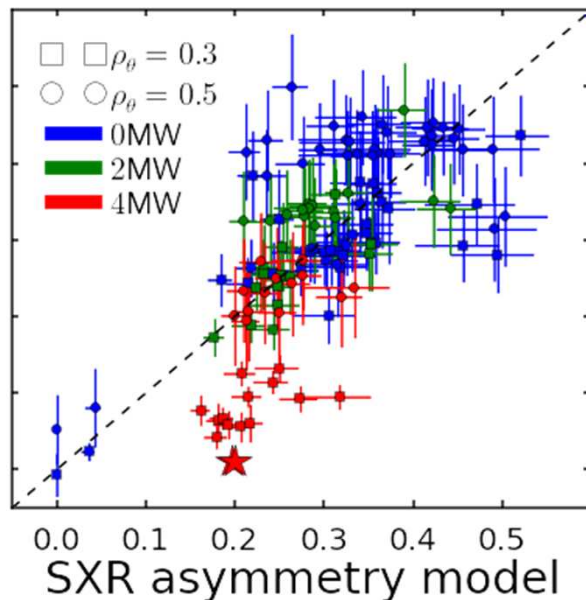


W IMPURITY POLOIDAL ASYMMETRIES OBSERVED AT ASDEX UPGRADE USING SOFT-X-RAY TOMOGRAPHY RECONSTRUCTION (D. MAZON)

- General purpose: Understand transport physics through SXR tomography with the goal to demonstrate acceptable W concentration (and potentially control) in H-mode and extrapolate to ITER/DEMO.
1. **Centrifugal asymmetries**: centrifugal model reproduces well the experiment observed asymmetries
 2. **Fast particle driven poloidal electric field**: discrepancies between TORIC SSFPQL and experimental results of asymmetry, limitation in HFS ICRH model?
 3. **Combined NBI and ICRH asymmetry effects**, study competing effects of LFS ICRH and NBI

SXR asymmetry experiment



- Evolution of measured asymmetry against **centrifugal force model** at two different normalized radii (0.3 and 0.5)
- Clearly at the ICRH location, $\rho_\theta = 0.3$, there is a clear discrepancy when 4MW heating is added. The measured asymmetry is **clearly overestimated by simulation**, as confirmed by TORIC code (**red star**) when including electric field created by trapped fast particles.

More detailed analysis of transport is on going with NEO and GKW codes