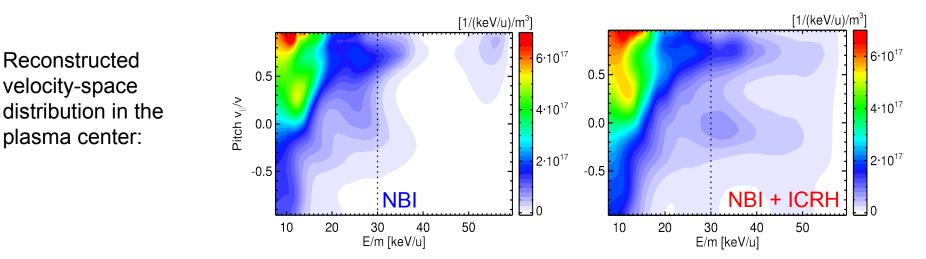
Tomographic reconstruction of the fast-ion phase space distribution from FIDA data at ASDEX Upgrade

## Acceleration of D beam ions by second harmonic ICRH:

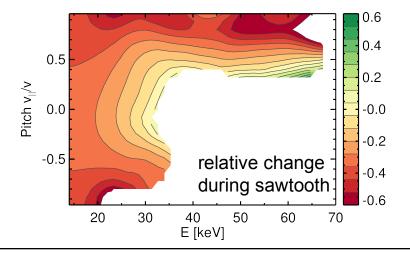


 $\rightarrow$  Effect of ICRH is clearly seen: Significant high energy tails at pitches 0.7 and -0.1

Velocity-space dependence of sawtooth-induced fast-ion redistribution:

Relative change of fast-ion velocity space density before/after a sawtooth crash:

 $\rightarrow$  lons with high v<sub>||</sub>/v are stronger redistributed than ions with v<sub>||</sub>/v  $\approx$  0



M. Weiland et al., "Phase-space resolved measurements of the influence of RF heating and MHD instabilities on the fast-ion distribution in ASDEX Upgrade"