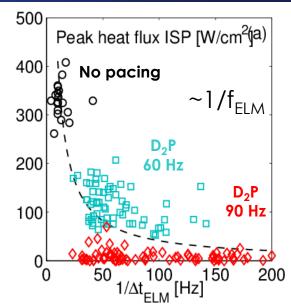
## High frequency ELM pacing obtained with D<sub>2</sub> and lithium pellets, including in ITER baseline scenario at low torque

## D<sub>2</sub> pellet injection up to 90 Hz in IBS

- $q_{peak} \sim 1/f_{ELM}$  up to 6X the natural  $f_{ELM}$
- At 90 Hz, secondary fueling effects affect pedestal and favor small ELMs



## Injection of non-fuel granules tested

- Lithium, Carbon, Boron Carbide (B₄C)
- ELM mitigation with Li for high q<sub>95</sub>, low n<sub>e</sub>
- In IBS, ELM pacing but not mitigation

