

D. Smith et al., Identification of characteristic ELM evolution patterns with Alfvén-scale measurements and unsupervised machine learning analysis

- BES measurements with Alfvénic time resolution capture the nonlinear evolution of ELM events on NSTX/NSTX-U
- Unsupervised machine learning algorithms identified groups of ELMs with similar evolution characteristics
 - The identified ELM groups correspond to specific parameter regimes relevant to ELM physics: I_p , κ , dR_{sep} , $n_{e,ped}$
- 2D BES measurements are now available on NSTX-U