

NSTX-U RESEARCH UPDATE

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10 Dec. 2018

Recently Published (first or co-authored)

- Kuroda et al., PPCF (Nov. 2018) – Transient CHI on QUEST
- Scotti et al., NF (Dec. 2018) – Divertor leg filaments
- Lunsford et al., NF (Dec. 2018) – ELM modification with Li granule injection on EAST
- Barchfeld, et al., Reymond et al., Delgado-Aparicio et al., Rev. Sci. Inst. (Oct. 2018)

Recently Accepted (first or co-authored)

- Diallo et al., PRL – Nonlinear coupling of pedestal modes leading to ELMs
- Soukhanovskii et al., FST – SGI for fueling in NSTX

Recently (or soon to be) Submitted/Under Review

- Guttenfelder et al., NF – NSTX-U L-modes in support of transport and turbulence validation
- Hao et al., PPCF – Low frequency modes in NSTX
- Myers et al., PRL – Catastrophic locking of 1/1 mode in sawtooth discharges
- Vail et al., PPCF – SF divertor control development
- Fredrickson et al., NF – ICE in NSTX and NSTX-U
- Boyer et al., NF – Nubeam Neural Net for realtime
- Kaye et al., NF – Theory, modeling, analysis results (FEC OV)
- Lunsford et al., FST – Pellet ablation from EPI for disruption mitigation
- Munaretto et al., NF – Effect of NSTX-U EF from coil misalignments on divertor footprints

Recent presentations

- FEC 2018 orals – Kaye (Menard), Podesta, Ku
- APS 2018 Invited – Sabbagh, Z. Wang, Hammond, Gorelenkov
- TOFE orals – Kaye (NAS), Maingi (TEC), Zhai (Eng.), Dugan (Eng.)
- General
 - Guttenfelder – STEM Symposium, West Morris H.S. (Nov. 2018)
 - Guttenfelder – Dept. of Phys., Portland State Univ. (USBPO Outreach)

Other Updates

- MAST-U Collaboration
 - First plasma July 2019
 - Physics ops Sept. 2019
- Discussions ongoing with Tokamak Energy UK wrt ST40 collaboration
 - Financial support from FES
- NAS report should be released this month