

Abstract Submitted  
for the DPP16 Meeting of  
The American Physical Society

**Progress in snowflake divertor research in DIII-D, NSTX and NSTX-U**<sup>1</sup> V A SOUKHANOVSKII, S ALLEN, M FENSTERMACHER, O IZACARD, C LASNIER, M MAKOWSKI, A MCLEAN, W MYER, D RYUTOV, F SCOTTI, LLNL, D ELDON, E KOLEMEN, P VAIL, PRINCETON U, G CANAL, GA/ORAU, R GROEBNER, A HYATT, A LEONARD, T OSBORNE, GA, R BELL, A DIALLO, S GERHARDT, S KAYE, B LEBLANC, J MENARD, M PODESTA, PPPL — Recent snowflake (SF) divertor DIII-D experiments focused on divertor heat transport under attached and radiative divertor conditions, incl 1-understanding of increased scrape-off layer width in SF-plus configuration at lower densities; 2-particle, heat and radiation distribution in the SF divertor with CD<sub>4</sub> seeding. NSTX data was analyzed to understand the link between SF divertor and ELM (de)stabilization with and without CD<sub>4</sub> seeding and lithium conditioning. Prep for SF divertor experiments in NSTX-U include 1-equilibria modeling with ISOLVER code using various sets of divertor coils and L- and H-mode plasma scenarios; 2-transport and impurity radiation modeling with UEDGE code; 3-new diagnostics (ie-a 100-200 kHz camera for null-region mode observations).

<sup>1</sup>Supported by DOE under DE-AC52-07NA27344, DE-AC02-09CH11466, DE-FC02-04ER54698.

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Date submitted: 15 Jul 2016

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