Abstract Submitted
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Verification and validation of electromagnetic instabilities from XGC1 in NSTX and NSTX-U plasmas PETER PORAZIK, ROBERT HAGER, SEUNG-HOE KU, WALTER GUTTENFELDER, RANDY CHURCHILL, CHOONG-SEOCK CHANG, Princeton Plasma Physics Laboratory — Electromagnetic instabilities will be investigated in the NSTX and NSTX-U plasmas, including edge pedestal area, using the gyrokinetic code XGC1. Cross-verification will be performed with other electromagnetic gyrokinetic codes. Results will be compared with experimental diagnostics data. Relation of the gyrokinetic instabilities to the edge localized instabilities and the maximal pedestal height-gradient will be discussed.

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