## Abstract Submitted for the GEC20 Meeting of The American Physical Society

P2I: A code for modelling Plasma Ion Implantation<sup>1</sup> MICHAEL BRADLEY, University of Saskatchewan, MARCEL RISCH, Georg-August-Universitat Gttingen — Plasma Ion Implantation (PII) is a technique in which a solid target immersed in a plasma is implanted with energetic ions via the application of a pulsed kilovolt-level negative bias voltage. PII allows implantation of very high ion fluences across broad-area targets. This makes it an ideal technique for many applications, including semiconductor device fabrication. When using PII, it is important to accurately model the implantation current, to ensure good fluence control for materials applications. This talk will describe the P2I code developed our group for this purpose, as well as some applications.

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