

Abstract Submitted  
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**Microwave heterodyne interferometer measurements on pulsed plasmas in the PHASMA experiment**<sup>1</sup> CUYLER BEATTY, PRABHAKAR SRIVASTAV, PEIYUN SHI, EARL SCIME, West Virginia Univ — First line integrated density measurements of a pulsed helicon plasma using a none perturbative microwave heterodyne interferometer on the PHase Space MApping (PHASMA) experiment are presented. The interferometer has two sources, one fixed at 31.700 GHz and the other set to 32.586 GHz, giving the desired frequency off-set for the mixers and demodulator. Line integrated density measurements of single flux rope experiments are also presented. These measurements were corroborated with Langmuir probe data taken at the same time. This work is supported by NSF Grants PHY-1827325 and PHY-1902111

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