## Abstract Submitted for the TSF14 Meeting of The American Physical Society

Laser-Induced Breakdown Spectroscopy of Plant Materials<sup>1</sup> JEREMY KUNZ, Baylor Univ, DMITRI VORONINE, Baylor University and Texas A&M University, ALEXEI SOKOLOV, MARLAN SCULLY, Baylor University, Texas A&M University, and Princeton University — Plant stress can be caused by many factors including drought, pollution, and microbial infestations; to name a few. Because many of these issues can affect agricultural crop yield, we use focused femtosecond laser pulses to perform laser-induced breakdown spectroscopy (LIBS) on plant materials in order to detect the effects of stress on plant life. LIBS has the advantage of being simple in its set-up making it an ideal candidate for performing plant stress detection in the field.

<sup>1</sup>Acknowledge the Institute for Quantum Science and Engineering at TAMU.

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Date submitted: 26 Sep 2014 Electronic form version 1.4