

Abstract Submitted
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Aurora Borealis Experiment (ABX): A Planeterra for Education and Outreach MICHAEL MCNULTY, Mercer County Community College, ANDY CARPE, ANDREW ZWICKER, PPPL — The Planeterra is an experiment invented by Jean Lilensten of the Laboratoire de Planetologie de Grenoble in France designed to simulate aurorae of various planets. It is done by placing two differently sized aluminum spheres in a bell jar with a pressure of approximately 75 mTorr. Each sphere has magnets inside and is electrically biased. An electrode with the opposite electrical bias is inserted into the bell jar so that the voltage between them is on the order of 300 V. A plasma is then created and an aurora is formed around the magnetic poles of the spheres or near the edge of the electrode. We have made a modified version of the planeterra, called the Aurora Borealis Experiment (ABX), based upon Lilensten's plans. We will present the technical details of the experiment and preliminary results of its use with a variety of different audiences.

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