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UVU VASIMR First Plasma Studies JOSHUA BAUM, RAYMOND

PERKINS, PHIL MATHESON, Utah Valley University Department of Physics — UVU is developing a magnetoplasma rocket as a means to introduce undergraduates to plasma physics and its associated diagnostics and technologies. Because of its novel use in using radio frequency (RF) energy to both produce and energize the plasma, the choice was made to develop a device modeled after a Variable Specific Impulse Magnetoplasma Rocket (VASIMR). This report details progress made in producing argon plasma with a magnetron source and in characterizing the plasma electron temperature and density with spectroscopic techniques.

Phil Matheson Utah Valley University Department of Physics

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