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ALPhA Laboratory Immersion in Plasma Physics A. DOMINGUEZ, A. ZWICKER, PPPL, J.D. WILLIAMS, Wittenberg University — According to the FESAC[1], as recently as 2014 there were a total of just 14 universities offering strong curricula in MFE sciences. Similarly, it was reported that 8 and 19 universities offer strong HEDPL and Discovery Plasma programs respectively. At the undergraduate level, there is also a lack of plasma physics in the curricula. This, regardless of its rich insights into the core subfields of physics, i.e., classical mechanics, electrodynamics, statistical mechanics and quantum phenomena. The coauthors have been leading a plasma physics workshop for the last 3 years directed at undergraduate physics professors and lecturers. The workshop is centered around a versatile and relatively inexpensive ($< \$10k$) plasma discharge experiment which lets students explore Panchens Law, spectroscopy and Langmuir probes. The workshop is part of the Advanced Laboratory Physics Association (ALPhA) Laboratory Immersions[2][3], and its objective is for the participants to become familiar with the experiments and incorporate them into their home institutions curricula as junior labs, senior labs or independent student projects. [1] Assessment of the Workforce Development Needs for the FES. June, 21, 2014 [2] APS March Meeting 2011, Abstract A14.011 [3] NSF grant NSF DUE-1122993

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