APR12-2012-020064

Abstract for an Invited Paper for the APR12 Meeting of the American Physical Society

Building and Using A National Digital Library for Computational Physics Education¹ WOLFGANG CHRISTIAN, Davidson College

Over the past dozen years we have produced some of the world's most widely used interactive computer-based curricular materials for the teaching of physics and this work has recently a SPORE Prize (Science Prize for Online Resources in Education) in Science. The materials we have developed are hosted on and distributed from the Open Source Physics (OSP) Collection of the ComPADRE National Science Digital Library. This presentation describes the interactive pedagogy that motivated the development of this learning platform. Examples from high school AP through university-level advanced topics will be presented.

¹Partial funding for this work was obtained through NSF grants DUE-0442581 and DUE-0937731.