Using the Open Source Physics Library to Teach Statistical and Thermal Physics

HARVEY GOULD, HUI WANG, Clark University, JAN TOBOCHNIK, NICHOLAS TUNG, Kalamazoo College — Statistical and thermal physics is becoming an increasingly important part of the undergraduate and graduate curriculum due in part to the availability of inexpensive and powerful computational resources and the importance of statistical concepts in much of current research in physics and related areas. We will show examples of curriculum materials for teaching topics in statistical and thermal physics with a focus on Java programs written using the Open Source Physics library. Examples of simulations will be demonstrated.

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