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The Use of Models and Simulation in the Teaching of Thermal Physics

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Abstract content
 (Max 300 words)

Students generally find the ideas presented in undergraduate thermal physics courses very difficult to grasp. What is more, many traditional textbooks present the material in an extremely abstract way. However, several authors have recently started to favour an emphasis on explaining the behavior of macroscopic systems by focusing on the microscopic world. The ideas of thermal physics are then presented by application of simplified models. Such an approach is presented here, and it is shown how the use of computer simulation, including the Easy Java Simulation package, can enhance student understanding of fundamental ideas.

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