Undergraduate Computational Physics Education: Uneven History and Promising Future

Richard F. Martin
Illinois State University Physics Department

While some physics educators have included computing in courses or have developed specialized courses for over 50 years, computational physics education has only slowly made inroads into the broader physics education community. Even now, when computation is arguably more important than ever in physics research and applications, it is rare that a physics department offers more than a single course in the topic to its undergraduate students. There have been several times over the years when interest in a more global approach to computational physics education has surged, only to subside without attaining the goal that computing finally take an essential role in the education of undergraduate physicists. In this presentation I will review some of the history of computational physics education, briefly discuss our experience with the program at Illinois State University, and suggest some direction for the future.