Partnership for the Integration of Computation into Undergraduate Physics

Lower Barriers

To Integrating Computational Activities Into Undergraduate Courses
The Birth of PICUP

Founders:

Norman Chonacky, Applied Physics, Yale U., Former Editor-in-Chief, *Computing in Science and Engineering*

David Winch, Physics, Kalamazoo College, 1935-2013


PICUP set out to address the conundrum:

Why, if so many physicists concede the importance of computation, is there so little presence of computation in undergraduate physics courses?
Through NSF funding...

1. **2016 PICUP/AIP National Survey Project**—survey of current computational use in the undergraduate physics curriculum in a national sample of colleges and universities offering the physics baccalaureate. **The results are in! Stay tuned...**

2. **Local Communities Project**—a regional AAPT section-centered faculty development model for fostering the integration of computation into the undergraduate physics curriculum

3. **National Scale Faculty Development and Community Building Project**—large scale faculty development activities coupled with an ambitious effort to build
   * a sustainable community of like-minded physics faculty across the country, and
   * a repository of useful and adaptable computational physics education resources

**PI's:**

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Practical Operation of the PICUP Organization

- Community Building

- Faculty Support
  - Worskhops / Synchronous Meetings
  - Faculty Opportunities/Rewards
  - Educational Materials Development

  ➔ Repository of Adaptable Resources

  ➔ Computing Environment/Language Agnostic
Greater Chicagoland Workshop
Hosts and Coordinators

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