Seattle Snowmass Summer Meeting 2022



Contribution ID: 50 Type: not specified

Transforming U.S. Particle Physics Education

Monday, 18 July 2022 20:40 (20 minutes)

The pursuit of knowledge in particle physics requires constant learning. As new tools become available, new theories are developed, and physicists search for new answers with ever-evolving methods. However, it is the case that formal educational systems serve as the primary training grounds for particle physicists. Graduate school (and undergraduate school to a lesser extent) is where researchers learn most of the technical skills required for research, develop scientific problem-solving abilities, learn how to establish themselves in their field, and begin developing their career. It is unfortunate, then, that the skills gained by physicists during their formal education are often mismatched with the skills actually required for a successful career in physics. We performed a survey of the U.S. particle physics community to determine the missing elements of graduate and undergraduate education and to gauge how to bridge these gaps. Our poster will present the results of this survey. We also recommend several specific community actions to improve the quality of particle physics education; the "community" here refers to physics departments, national labs, professional societies, funding agencies, and individual physicists.

In-person or Virtual?

In-person

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Session Classification: Poster Session