Frances Hellman, Professor of Physics at UC Berkeley

Her talk centered on a study done to examine the correlation between GRE scores and the success of graduate students in physics programs. The slides of her talk may not be available because the data is not yet published.

The students in the study were admitted between 1985 and 1999. Student who withdrew have the same demographics as those who did not withdraw, and they didn’t differ in terms of their incoming Physics GRE score. Furthermore, when advisors were asked to rate a graduate student’s success, their ratings correlated with none of the incoming metrics, and retroactive cutoff metrics don’t change this result.

It was mentioned that it would be interesting to check the correlation between Physics GRE scores and qualifying exam scores or success. Note that the GRE, including the Physics GRE, is not intended to predict the outcomes of graduate students, and it doesn’t. It’s merely meant to predict the success of a student in the first year of graduate school.

A suggestion given was to consider constructing diverse cohorts instead of having a singular focus on individuals.

Çagliyan Kurdak, Professor and Director of Applied Physics at the University of Michigan

Çagliyan’s talk focused on an evaluation of the University of Michigan’s Applied Physics graduate program.

Çagliyan said that it’s important to have explicit program goals. In defining these goals, two important questions include:

- What is important?
- What would we measure ourselves against?

His department uses a “holistic review” admission process. The GRE is not required and not considered. Furthermore, after admission, there is flexibility in the curriculum and, and the path through the program can reverberate back into how admissions decisions are made.
Andrea Palounek (Physicist at Los Alamos National Laboratory)

Andrea raised a good question: “Which graduate student outcomes and future careers are considered a ‘success’?” The answer to this question can influence how students are hired. Specifically, what is the diversity of skills and proficiencies need in the “collective workforce” for the success and health of the enterprise of Physics as a whole?

An excellent point was made that it is not a failure of people to need training and development in order to become a successful worker.

Post-talk discussion and suggestions

• “Critical mass” can be an ingredient in cohort building, and this can enhance the success of the entire cohort. For example, minority students can sometimes benefit by having a “critical mass” of others with whom to learn, work, and bond.
• We should use all available metrics to measure progress and success in the spirit of effectively supporting everyone for success throughout graduate school.