Who is good at physics and why? The role of gender in peer recognition.

Meagan Sundstrom, Ph.D.
Drexel University

Abstract: When students feel that others, including their peers, recognize them as a physicist, they are more likely to view themselves as physicists and persist in their physics courses. Previous research, however, has identified a gender bias in peer recognition—where student nominations of their strong peers disproportionately favor men over women—in some undergraduate science courses. Here, I present research using social network analysis methods to further understand the role of gender in peer recognition in the discipline of physics. We use student responses to a survey probing which peers they recognize as being a strong physics student, the reasons for which they recognize these peers, and the extent to which they feel that they are recognized by their peers. We find in some, but not all, physics courses that student nominations of strong physics peers exhibit a gender bias favoring men over women. Even in courses containing this bias, we observe no significant differences in the skill sets for which men and women nominate men versus women as strong physics students. Our data also indicate that, for men and women receiving the same number of nominations from peers, women report significantly lower perceptions of their peer recognition than men. I will present these results and their implications for instruction.

Host: Shannon Willoughby

* Refreshments served in the Barnard second floor atrium at 3:45. *