

Leah Jager
Grinnell College

“A trip to the dressing room -- does your probability model fit properly?”

Abstract: When assigning grades, some professors assume that scores on an exam follow a normal, or bell-shaped, distribution. Is this a reasonable assumption to make? One way to judge how well a distribution 'fits' a data set is to perform a goodness-of-fit test. In this talk, I will discuss methods for assessing whether a probability model is a good fit for a set of data and present some examples of common goodness-of-fit tests. Finally, I will use these ideas to motivate a new family of statistics that can be used to test how well a probability model fits a set of data.