

1145-AB-2016 **Rick Cleary** and **Talithia Williams*** (twilliams@math.hmc.edu). *Data Science for Mathematicians: What We Already Know and What We Need to Learn.*

Many mathematics departments and individual mathematicians, especially those at smaller colleges, are being encouraged to help prepare students for careers and/or graduate study in data science. Mathematics, in fact, underlies much of the theoretical underpinnings of data science. This invited paper session will demonstrate some ways that mathematicians have moved into the data science world. In this initial talk we will discuss some of the mathematical topics that are important in data science, and also the background and skills needed to be successful in starting a data science course. We conclude with applications of how these topics have shaped our experience with teaching and advising students. (Received September 24, 2018)