

Applied Mathematics skills Improvement for Graduate studies Advancement

July 10 -14, 2023



Overview

AMIGAs is a week-long summer program for incoming second or third year students in graduate programs in the USA, designed to support and train a new generation of mathematical scientists in applied and computational mathematics, with a special emphasis on increasing the number of women, particularly those from historically excluded racial groups, in both academia and industry.

Applied mathematics research is rapidly shifting from classical applied mathematics, which focuses mainly on physical applications, to one that is more heavily driven by data and technology. In this Big Data era, students need to be suitably trained in computational skills such as statistics, optimization, and machine learning.

AMIGAs seeks to provide participants with the initial skills and the confidence to transition smoothly to the next stage of their graduate program through tutorials, professional development activities, and research talks related to the mathematics of data science and its applications. Tutorials will focus on skills such as computer programming, mathematical modeling, and data management and computing. In addition, AMIGAs will provide participants with a network of women interested and/or thriving in industrial careers.

Data on the number of women doctorates and underrepresented minority groups in mathematics and applied mathematics are well known. The steps after graduate course work can be even more difficult for students from these historically excluded groups, as few graduate programs have targeted mentoring support and guidance. Therefore, another important component of this program is networking, building a sense of community among peers, and professional development sessions.

Participation

Additional information about this workshop including application information can be found on the web page listed below. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission, and we welcome their applications.

All components of the application must be submitted by the deadline of **March 19, 2023 at 11:50pm PT** to be considered for participation in this workshop.

Organizers

Erika Tatiana Camacho (Arizona State University),
Keisha Cook (Clemson University),
Malena Español (Arizona State University),
Alicia Prieto Langarica (Youngstown State University),
Nancy Rodriguez (University of Colorado Boulder)

Tutorial Speakers

Patricia Medina (New York City College of Technology)
Vianey Leo Barajas (University of Toronto)
Keisha Cook (Clemson University)
Umaa Rebbapragada (Jet Propulsion Laboratory)

