

Department of Mathematics and Statistics

Colloquium Series Distinguished Speaker



"It seems like they purposefully try to make as many kids drop": Characterizing logics and mechanisms of racial-gendered inequality in undergraduate calculus instruction as a white, patriarchal space

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Abstract: Racial-gendered inequalities in learning opportunities and STEM persistence depict the function of undergraduate mathematics as a white, patriarchal space. A central influence shaping such inequalities among Black and Latin* students is instruction, especially in calculus courses that departments have historically used to sort students into and out of STEM. However, features of calculus instruction that reinforce racial-gendered inequalities are unexplored in the literature. This presentation highlights findings from a study of Black and Latin* students' perceptions of racialized and gendered aspects of calculus instruction, revealing mechanisms that shape an inequitable distribution of opportunities for participation, support, and STEM retention. The analysis uncovered how seemingly neutral instruction grounded in colorblind, gender-neutral logics in mathematics (e.g., instructors hold more mathematical authority than students) collided with racist and misogynist influences (e.g., stereotypes of mathematical ability) to produce oppressive mechanisms. Implications for departmental and classroom practices are outlined to disrupt racialized-gendered mechanisms of calculus instruction and thus expand socially-affirming educational opportunities for Black and Latin* students in undergraduate mathematics.

Thursday April 29, 12:00 - 1:45pm (talk + remote lunch/discussion hour)