Imagine a world where the brightest minds from every race and culture come together to solve our greatest challenges.

Breaking barriers to boost diversity in Physics and STEM.

### Identifying Barriers to STEM in Underrepresented Groups

#### Method

**Undergraduate physics majors** at Georgia Institute of Technology

- **Race/Ethnicity:**
  - White: 74.1%
  - Hispanic: 12.8%
  - Black: 7.7%
  - Asian: 5.8%
  - US Indigenous: 0.8%

**K-8 educators** at a nearby Atlanta metro school district

- **Teaching Topic:**
  - Math: 48%
  - Science: 33%
  - Reading/Writing: 19%

#### Results

My research showed that **stereotype threats** are still a prominent barrier.

#### Discussion

An examination through the lens of Critical Race Theory (CRT) in education.

- Highlighted CRT terms: colorblindness, interest convergence, and whiteness property

- **A Caucasian educator participant indicated that teaching methods may not be changed to accommodate demographic groups and that ways of learning have not been resonating with students.**

- **An examination through the lens of Critical Race Theory (CRT) in education.**

- **Proposed solutions:** early exposure, better training and development for teachers, and diverse role models

#### Future Works

- Expanding interviews to include parents with K-12 age children, a wider pool of educators from different districts that represent the full socioeconomic ladder within the community, school boards, and minority high schools with opportunities to take physics dual enrollment courses with colleges and universities.

- Deeper comprehension for understanding the barriers and appropriately implementing solutions that not only builds more diverse teams for STEM but also changes across multiple domains, such as societal equity, economic prosperity, scientific innovation, educational equity and policy and practice.