While nearly a half of the students taking physics in high school are women, only a fifth of the students interested in physics majors in college are women. This talk will present the framework and research motivating the STEP UP 4 Women Project, a nationwide initiative to mobilize and help high school physics teachers better engage women in physics and, by doing so, substantially increase the number of women majoring in physics nationally. The project draws on the extant research evidence to develop and further test strategies that facilitate the physics identity development of young women. The evidence-based strategies will be part of a national campaign to support high school physics teachers to inspire a new generation of women physicists. This work is supported by the National Science Foundation under Grant No. 1720810, 1720869, 1720917, and 1721021.

Bio:

Zahra Hazari is an Associate Professor in the Department of Teaching and Learning and the STEM Transformation Institute as well as an affiliate faculty member in the Department of Physics at Florida International University. She holds a B.S. in physics and mathematics, M.S. in physics, and Ph.D. in physics education. Her doctoral and postdoctoral work were at the University of Toronto and the Harvard Smithsonian Center for Astrophysics. Dr. Hazari’s research focuses on reforming physics learning environments in an effort to improve critical educational outcomes for under-represented groups in physics, especially women. In particular, her work centers on physics identity development, a framework which has provided critical insight on students’ persistence in physics. Dr. Hazari’s research earned her a National Science Foundation (NSF) CAREER Award and her research findings have been featured in US News and World Report, Washington Monthly, Science Magazine, Scientific American, LiveScience, Science for the People, and APS News. Dr. Hazari served on the Editorial Board for the Journal of Research in Science Teaching (JRST), APS’s Committee for the Status of Women in Physics, and AAPT’s Committee on Women in Physics. She has taught courses in physics, calculus, science methods for pre-service/in-service teachers, and research methods for graduate students.