MARISSA LOVING, Georgia Institute of Technology-Main Campus *Covers, Curves, and Length Spectra*

I will share some of my ongoing work with Tarik Aougab, Max Lahn, and Nick Miller in which we explore the simple length spectrum rigidity of hyperbolic metrics arising from Sunada's construction. Along the way we give a characterization of equivalent covers (not necessarily regular) in terms of simple elevations of curves, generalizing previous work with Aougab, Lahn, and Xiao.