1163-B1-641 **Carolyn Hamilton** and **Violeta Vasilevska*** (violeta.vasilevska@uvu.edu), Orem, UT 84058. Engaging High School and Undergraduate Female Students in Extracurricular Math Activities. Preliminary report.

In this talk, the structure of the Utah Valley University outreach program Math Girls Rock! will be discussed. Since 2011, this program has engaged hundreds of high school and undergraduate female students through hands-on extracurricular math activities and encouraged them to continue their education. Math Girls Rock! is designed as a year-long Math Club for Young Women, offering weekly meetings with the undergraduate female students and a series of after-school meetings (2 times per semester) for the high-school girls. The program offers mentoring on two levels: the project directors mentor the undergraduate students who then mentor the high school girls through the designed hands-on projects. It engages both student groups in various fun and interesting math projects that show that math is exciting, beautiful, and applicable to various other fields. In addition, the projects are designed to spark student curiosity, to stimulate student inquiry, to get them to get "their hands dirty" with math, and to inspire them to want to learn more. Moreover, the pre- and post-survey data on how learning math concepts in these types of informal settings affected the participants' attitudes toward mathematics will be presented. (Received September 10, 2020)