

1154-VG-1119 **Sarah L Sparks*** (sarah.sparks@unco.edu), **Alees Lee**, **Gulden Karakok** and **Katie Morrison**. *Problems from Math Teachers' Circle Outreach Program*. Preliminary report.

The Northern Colorado Math Circles program is one of the outreach efforts of the School of Mathematical Sciences which aims to reach both middle school students and in-service teachers. The goal of this outreach program is to enrich teachers' mathematics content knowledge through engaging in rich mathematical problems, and to increase student and teacher enthusiasm for mathematics. Both student and teacher participants work on math problems that also include mathematics content that they do not necessarily experience in their school curriculum. Furthermore, we asked our teacher participants to create challenging math problems for their students to apply in their classrooms. In this session, we will share a sample of math problems that we facilitated with middle school in-service teachers and discuss their experiences with these problems. We will share teacher participant created math problems and our observations of connections between their experiences solving math problems and creating math problems. (Received September 13, 2019)