

1056-Q1-1267 **Harold B Reiter*** (hbreiter@uncc.edu), Department of Mathematics, UNC Charlotte, 9201 University City Blvd, Charlotte, NC 28223, and **Anthony Fernandes** (Anthony.Fernandes@uncc.edu), same as above. *Mathematics Teachers' Circles*. Preliminary report.

The Mathematics Teachers' Circle is a national initiative started in 2006 by the American Institute of Mathematics (AIM). This initiative is based on the premise that engaging Middle school teachers in mathematical problem solving will enhance their content knowledge of mathematics, help them experience the challenge of solving a new problem, and provide a support system and resources for the teachers. At the local Circles, teachers attend monthly meetings where the facilitators engage through appropriate problems. The teachers work in interactive groups as the facilitators move around and listen to ideas and provide needed input. Later teachers have a chance to share their strategies with the entire group. Special efforts are made to ensure that the teachers are comfortable sharing their mathematical ideas with their peers and in the presence of the facilitators. We will discuss the set-up of one local Teachers' Circle, engage the audience in a problem solving experience, discuss the benefits reported by teachers, and the challenges faced by the facilitators. The audience would get a glimpse of how to set up their own local Circle, plug in to the larger Teachers' Circle network, and see how productive collaboration between mathematicians and teachers can work. (Received September 21, 2009)