1106-S5-728　　　　　**Maria Droujkova*** (`droujkova@gmail.com`), 309 Silvercliff Trl, Cary, NC 27513. *1001 Circles: The Surprising Diversity.*

What is a mathematical circle from the point of view of its leader and participants? What types of groups call themselves "mathematical circles"? What other entities, such as summer camps, learning coops, or maker spaces, form the larger social ecosystem where math circles are situated? Who are leaders of math circles, how do they grow, and what support do they need?

The "1001 Circles" paper will answer these and other overarching questions. It summarizes findings from a series of interviews with math circle leaders and mathematics education project leaders, as well as observations from open online courses for parents and math circle leaders at Natural Math. It will use particular examples from mathematical circles to illustrate general points. (Received September 05, 2014)