Padmanabhan Seshaiyer* (pseshaiy@gmu.edu), 4400 University Drive, MS 3F2, Mathematical Sciences, George Mason University, Fairfax, VA 22030, and Jennifer Suh. Inquiry-based problem solving strategies through interactive approaches for engaging students in mathematics. Preliminary report.

In this session, we will share how students can be engaged and challenged in inquiry-based learning through interactive approaches with mathematics, scientific investigation and critical analysis. Such opportunities with rich mathematical tasks require students to use higher-level critical thinking strategies and self monitoring problem solving skills when engaged in real-world problems that require complex reasoning, communication and a hands-on approach. In this session, we will engage the participants in open-ended exploration with mathematical problem solving and introduce them to some novel interactive problem-solving approaches and opportunities that will benefit students. (Received August 27, 2013)