

1106-VM-1900 **Milé Krajcevski*** (mile@mail.usf.edu), University of South Florida, Department of Mathematics & Statistics, 4202 East Fowler Av., CMC342, Tampa, FL 33620-5700. *Do typical visual representations obstruct mathematical cognition?* Preliminary report.

In this talk we reflect on the powerful role typical visual representations of some mathematical notions in geometry play in students' ability to formulate mathematical arguments. We notice that some of the difficulties associated with the use of visualization as a facilitator of mathematical cognition, are results of our inability to escape these typical representations. We report on a pilot study conducted on a small scale among prospective middle school mathematics teachers. (Received September 15, 2014)