

**Meeting:** 1003, Atlanta, Georgia, MAA CP V1, MAA Session on Research on the Teaching and Learning of Undergraduate Mathematics

1003-V1-87            **John Urenko\*** (jbu2@psu.edu), Penn State Capital College, 200 University Drive, Schuylkill Haven, PA 17972. *The Special Nature of Mathematical Definitions.*

Advanced mathematical thinking is characterized by precise definition as well as by logical deduction. In a recent article in the Monthly B. Edwards and M. Ward, based on their research in undergraduate mathematics education, recommended that the special nature of mathematical definitions be treated as a concept in its own right. By employing a categorization of definitions based on method as well as purpose the special nature of mathematical definitions can be characterized. This characterization constitutes a concept definition of the special nature of mathematical definitions that enhances the implementation of the recommendation of Edwards and Ward. (Received August 02, 2004)