Bogdan D. Suceava\* (bsuceava@fullerton.edu), Department of Mathematics, California State University Fullerton, P.O. Box 6850, Fullerton, CA 92834-6850. Historical vs axiomatic viewpoint: teaching today foundations of geometry.

Teaching foundations of geometry could be challenging if students are not familiar with axiomatic systems. Furthermore, if they are not familiar with basic concepts in geometry, the task could raise even more challenges. One solution would be to cover some geometric facts in the historical order they were discovered in the XVIII-th century, before presenting the axiomatic viewpoint. Euler's contributions to the geometry of triangle could be used as a guideline in presenting geometric concepts that preceded Bolyai and Lobachevski's contributions. The question is what are the educational benefits of presenting some results in historical order rather than in axiomatic order? In our talk we will explore this question and some options. (Received August 01, 2005)