962-N1-433 Alan S. McRae* (mcraea@wlu.edu), Department of Mathematics, Robinson Hall, Washington and Lee University, Lexington, VA 24450. Dynamic Projective Geometry.

Juan Carlos Àlvarez Paiva (Université Catholique de Louvain) and the speaker (W&L University) are continuing development of a web site begun by Dr. Àlvarez in support of a discovery-based, interactive course for projective geometry. Among our aims are: to exercise the student in the visualization of mathematical concepts, to present a unified view of basic geometry as the study of group actions, to develop and exercise problem-solving techniques, and to give the student a sense of the unity of mathematics by relating projective geometry to other fields such as special relativity, integral geometry, topology, and hyperbolic geometry. A modified Moore method is used in the course to motivate key definitions and to develop subjects through a series of problems. It is the purpose of this talk to demonstrate the effective use of the interactive geometry software CinderellaTM in accomplishing some of our pedagogical goals. CinderellaTM is based on fundamental concepts from projective geometry and invariant theory and may be run inside a web browser, making it ideally suited for our purposes. (Received September 14, 2000)