1067-14-133Jennifer Elyse Bonsangue* (jennifer.bonsangue@csuci.edu), One University Drive, CSU
Channel Islands, Camarillo, CA 93012, and Ivona Grzegorczyk. Visualizing Cubic Algebraic
Surfaces.

Algebraic surfaces are the collection of points satisfying a finite number of polynomial equations. In the case of degree three surfaces, the question of classification is an open problem. We visualize these surfaces using modern software and study their properties (such as a singularities, symmetry groups, deformations, families, lines and curves lying on these surface). In particular, we analyze Cayley's nodal surface and Clebsch's cubic. By studying the effects of their deformations, we attempt to identify properties of features that may be indicative of possible classes. (Received July 27, 2010)