1116-01-1659     **Deborah Kent\*** (`deborah.kent@drake.edu`). *Visualizing a constructive cubic solution: Omar Khayyam meets Oliver Byrne.*

Although a geometric solution to a cubic equation may seem peculiar to modern eyes, the study of cubic equations was initially motivated by geometric problems. Twenty-first century readers tend to lack fluency in reading proofs of this type without rewriting them in familiar algebraic notation. This presentation employs Oliver Byrne's application of colour and space to showcase one of Omar Khayyam's geometric constructions of a solution to a cubic. This graphical approach removes the modern reliance on algebraic notation and focuses instead on a visualization that emphasizes ratios, conic sections, and dimensional reasoning. (Received September 21, 2015)