Daniel A Brake* (danielthebrake@gmail.com). Printing Algebraic Surfaces with Singularities.

Visualization has always been a great tool for mathematicians and scientists. The new art of 3D printing has opened exciting possibilities for ways to interact with mathematics in a very tangible way, for research, teaching, outreach, and aesthetics. This talk will discuss methods and challenges for printing algebraically defined surfaces, namely the computer program Bertini_real, and tactics for dealing with singularities and non-compactness. (Received September 03, 2014)