1153-14-57   **Burt Totaro*** (`totaro@math.ucla.edu`). *K3 surfaces and high-dimensional Fano varieties.*
A calculation on a K3 surface determines whether the surface is contained in a Fano 3-fold, or in a higher-dimensional Fano variety. So one can experiment by computer to prove the existence of a high-dimensional Fano variety, and then try to find the variety by hand. (Received August 14, 2019)