1035-16-1700   **Susan J. Sierra*** (`ssierra@umich.edu`), Mathematics Department, University of Michigan, 2074 East Hall, 530 Church Street, Ann Arbor, MI 48109. *The geometry of birationally commutative graded rings.*

We consider a Noetherian $\mathbb{N}$-graded domain R that is *birationally commutative*: that is, the graded quotient ring of R is of the form $K[z, z^{-1}; \sigma]$, where K is a field. We investigate the geometry of the data that define R. In particular, we discuss progress toward the complete classification of birationally commutative projective surfaces. (Received September 20, 2007)