1108-11-501   **Nicholas Miller*** (`mille965@purdue.edu`). *Some Natural Bijections for Locally Equivalent Fields.*

For a pair of locally equivalent fields, one can construct an isomorphism between their respective Brauer groups. We will briefly recall the definition of the Brauer group for a number field and what it means for a pair of number fields to be locally equivalent. We will then report on joint work with Cox, Linowitz, and McReynolds, exploring several nice features of this isomorphism. Included in these are bijections between orders, maximal arithmetic lattices, and volumes of locally symmetric orbifolds. (Received January 20, 2015)