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Patrick Morandi* (pmorandi@nmsu.edu), Department of Mathematical Sciences, MSC 3MB, New Mexico State University, Las Cruces, NM 88003, and **B. A. Sethuraman** and **Jean-Pierre Tignol**. *Division algebras with an anti-automorphism but with no involution.*

We give examples of division rings which possess an anti-automorphism but no involution. Their motivation comes from geometry; they yield examples of projective geometries which have dualities but no polarities. In this talk we will discuss some simple examples of small degree over number fields along with a class of examples using twisted Laurent series algebras. Furthermore, by using local-global machinery, for any $n > 2$ and $m \leq 1$ we obtain examples over number fields of index n and possessing an anti-automorphism of period $4m$. (Received August 29, 2005)