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T. Alden Gassert and **Katherine E. Stange*** (kstange@math.colorado.edu). *Monogeneity of division fields*. Preliminary report.

Let K be an elliptic division field: a number field generated by the coordinates of the n -torsion points on an elliptic curve. I will discuss work in progress concerning whether the ring of integers of K has a power basis. The main tools are an algorithm of Guàrdia, Montes and Nart, combined with an analysis of the valuations of division polynomials. (Received January 16, 2016)