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Rachel Davis* (davis705@math.purdue.edu), West Lafayette, IN 47907, and **Edray Herber Goins**. *Galois Theory of a Quaternion Group Origami*. Preliminary report.

Let E be an elliptic curve over \mathbb{Q} . An origami is a pair (C, f) , where C is a curve and $f : C \rightarrow E$ is a map, branched only above one point. We study an origami with deck transformation group the group of quaternions, a non-abelian group of order 8. Next, we adjoin the coordinates of the pre-images of a rational point to \mathbb{Q} and study the Galois theory of the resulting field extension and the relationship to the usual division fields of the elliptic curve. (Received July 27, 2015)