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Andrew R. Booker and **Andrew V. Sutherland*** (drew@math.mit.edu), Department of Mathematics, Massachusetts Institute of Technology, 77 Massachusetts Ave., Cambridge, MA 02139, and **John Voight** and **Dan Yasaki**. *A catalog of genus 2 curves over \mathbb{Q}* . Preliminary report.

Cremona's tables of elliptic curves over \mathbb{Q} are a well known and widely used resource that is now incorporated into the L-Functions and Modular Forms Database (LMFDB). The LMFDB was recently expanded to include a catalog of genus 2 curves over \mathbb{Q} , along with a wealth of associated data, including geometric and arithmetic invariants of the curve and its Jacobian, information about rational points, and, perhaps most significantly, its L-function. I will give an overview of this catalog, including details of its construction and a tour of some of its features. (Received September 20, 2015)