John W Jones* (jj@asu.edu), SoMSS, PO Box 871804, Tempe, AZ 85287. The L-functions and Modular Forms Database. Preliminary report.

We will discuss the LMFDB, a large-scale collaborative project which provides a web interface to data and information relevant to modern number theory. The data includes Cremona's tables of elliptic curves, our tables of local and global fields, automorphic forms of several types, and L-functions. It has already been used to help mathematicians make and test conjectures, and generally makes various complicated abstract objects and conjectures more concrete and accessible. (Received November 20, 2015)