1114-20-339 Klaus M Lux* (klux@math.arizona.edu), 617 N. Santa Rita Rd., Tucson, AZ 85721. The 3-modular character table of the Fischer group Fi23. Preliminary report.

We will speak on the computation of the 3-modular character table of the Fischer group Fi23, which is a contribution to the ongoing modular Atlas project. This is joint work with L. Goergen and G. Hiss both at RWTH Aachen University. In the talk, we will give a survey of the main techniques used, which involve methods from computational character and representation theory, most of them implemented in the computer algebra system GAP. The largest module we had to analyze was a reducible module of dimension 186844 over GF(3) and we will discuss how that was done in a reasonable amount of time. (Received September 01, 2015)