1145-11-2544 Sam Schiavone* (sam.schiavone@gmail.com), 27 N Main St, Hanover, NH 03755. Computing A Database of Belyi Maps.

In the paper Numerical calculation of three-point branched covers of the projective line, we presented a method for computing equations of Belyi maps based on the correspondence described by Grothendieck in his celebrated work Esquisse d'un Programme. In this talk, we discuss the progress we have made in exhaustively computing all Belyi maps of low degree using this method. We also present some initial analysis of the data we have computed. Joint work with Michael Musty, Jeroen Sijsling, and John Voight. (Received September 25, 2018)