Jon F Carlson* (jfc@math.uga.edu), Department of Mathematics, University of Georgia, Athens, GA. Computing Schur algebras. Preliminary report.

This is a report on a project, started at a meeting at AIM in June, to compute generators, relations and other information for Schur algebras. The project uses a matrix algebra package which was developed by the speaker and Graham Matthews and is currently available in MAGMA. We actually compute a basic algebra for the Schur algebra and from that we are able to obtain some homological information on the simple modules. We are interested in such questions as to when the Schur algebra might be a Koszul algebra. The lecture will present a report on progress to date. (Received September 03, 2007)