1151-20-47   **Alexander J Hulpke*** (`hulpke@colostate.edu`), Department of Mathematics, Colorado State University, 1874 Campus Delivery, Fort Collins, CO 80523. *Practical Calculations for Matrix Groups.*

In this talk, aimed at a general group-theoretic audience, I will survey the current state of practical algorithms for calculating with matrix groups, over finite fields, residue class rings, and over the integers: What tools are used? What problems are ameneable to calculations? How do the approaches used differ from what was used in the past, and how might they extend to other classes of groups. (Received August 04, 2019)