JIM SHANK, University of Kent, Canterbury, CT2 7NF, United Kingdom On the ring of invariants of the third symmetric power representation of $\mathrm{SL}(2,p)$

I will describe an explicit finite generating set for the ring of invariants for the third symmetric power representation of $\mathrm{SL}(2,p)$. The proof that the described invariants generate relies on the construction of an infinite SAGBI basis and a Hilbert series computation.

The presentation will be based on work with my PhD student, Ashley Hobson.