## 1145-22-572Jacksyn Bakeberg (jacksyn.bakeberg@mail.mcgill.ca), Kathryn Blaine<br/>(kb7124@bard.edu) and Firas Hindeleh\* (hindelef@gvsu.edu), 1 Campus Dr, Allendale, MI<br/>49401. Classification of seven-dimensional solvable Lie algebras with five-dimensional<br/>nilradical. Preliminary report.

Low dimensional solvable Lie Algebras were completely classified up to dimension six. A general theorem asserts that if g is a solvable Lie Algebra of dimension n, then the dimension of its nilradical is at least  $\frac{n}{2}$ . For the seven-dimensional algebras, the nilradical's dimension could be 4, 5, 6 or 7. We give an update on this project and share our contribution to the five-dimensional nilradical case. This research was conducted as part of the 2018 REU program at Grand Valley State University. (Received September 10, 2018)