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Firas Y Hindeleh* (hindelef@gvsu.edu), 1 Campus Dr, Allendale, MI 49401. *On the Classification of Seven Dimensional solvable Lie Algebras With six-dimensional 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. The four and seven-dimensional nilradical cases were classified. We examine the six-dimensional nilradical case. We first looked for the six-dimensional nilpotent algebras and found 32 algebras. In this talk, we give an update on our progress with this project and shed light on the latest six completed sub-cases. (Received August 21, 2017)