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nilradical

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Author bwebste (988) Entry type Definition Classification msc 17B05 Let $\mathfrak g$ be a Lie algebra. Then the nilradical $\mathfrak n$ of $\mathfrak g$ is defined to be the intersection of the kernels of all the irreducible representations of $\mathfrak g$. Equivalently, $\mathfrak n=[\mathfrak g,\mathfrak g]\cap\operatorname{rad}\mathfrak g$, the intersection of the derived ideal and radical of $\mathfrak g$.