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Title:	Dimension quotients of metabelian Lie rings
Authors:	Passi, I.B.S. (/jspui/browse?type=author&value=Passi%2C+I.B.S.) Sicking, T. (/jspui/browse?type=author&value=Sicking%2C+T.)
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Abstract:	For a Lie ring L over the ring of integers, we compare its lower central series $\{\gamma_n(L)\}_{n \geq 1}$ and its dimension series $\{\delta_n(L)\}_{n \geq 1}$ defined by setting $\delta_n(L) = L \cap \omega_n(L)$, where $\omega(L)$ is the augmentation ideal of the universal enveloping algebra of L . While $\gamma_n(L) \subseteq \delta_n(L)$ for all $n \geq 1$, the two series can differ. In this paper, it is proved that if L is a metabelian Lie ring, then $2\delta_n(L) \subseteq \gamma_n(L)$, and $[\delta_n(L), L] = \gamma_{n+1}(L)$, for all $n \geq 1$. © 2017 World Scientific Publishing Company.
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