

Rings which satisfies generalized Lie commutators

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Abstract

Let R be a ring and let $x, y \in R$. Define the generalized Lie commutators as follows: $[x, {}_0 y] = x$ and $[x, {}_k y] = [x, {}_{k-1} y]y - y[x, {}_{k-1} y]$ for $k=1,2,\dots$. In this talk we study rings satisfying $[x^{m(x,y)}, {}_{k(x,y)} y^{n(x,y)}]^{r(x,y)} = 0$ where $m(x,y), k(x,y), n(x,y)$ and $r(x,y)$ are natural numbers.

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