

Given a Lie algebra \mathfrak{g} and its universal enveloping algebra $\mathfrak{U}(\mathfrak{g})$, then an element $x \in \mathfrak{U}(\mathfrak{g})$ is called a *Lie element* if x is in the image of \mathfrak{g} in $\mathfrak{U}(\mathfrak{g})$.

This term is most often used for free Lie algebras and specifically in the famous Baker-Campbell-Hausdorff formula (theorem).