

GAP Package CKForms

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The CKForms package is used for finding standard compact Clifford-Klein forms of a non-compact homogeneous space G/H where G is a simple linear Lie group and H is a non-compact reductive Lie subgroup of G .

The current version of this package is version 2.0, released on 2021-06-06. For more information, please refer to the package manual. There is also a README file.

Dependencies

This package requires GAP version ≥ 4.10 .

The following other GAP packages are needed:

- sla $\geq 1.5.3$
- CoReLG ≥ 1.54

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Abstract

In this package we develop algorithms generating triples $(\mathfrak{g}, \mathfrak{h}, \mathfrak{l})$ of Lie algebras (\mathfrak{h} and \mathfrak{l} are subalgebras of \mathfrak{g}) such that the corresponding triples of Lie groups (G, H, L) fulfill some necessary conditions required for triples inducing standard compact Clifford-Klein forms. The program is used for searching for standard compact Clifford-Klein forms.

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Feedback

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