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## $B_{\mathfrak{m} 2}$ -型有限W-代数的实现

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### Realization of $B_{\mathfrak{m} 2}$ type finite W-algebras

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摘要 具体构造了 $B_{\mathfrak{m} 2}$ 型李代数在所有幂零轨道下对应的有限W-代数的生成元集, 并通过计算得出了生成元之间的关系式, 从而给出了 $B_{\mathfrak{m} 2}$ 型有限W-代数的具体实现.

关键词:  $B_{\mathfrak{m} 2}$ -型李代数 非线性李代数 Kazhdan\,滤过 有限W-代数

Abstract: In this paper we constructed an explicit set of generators for the finite W-algebras associated to all nilpotent orbits of  $B_{\mathfrak{m} 2}$  type Lie algebras. We also computed the relations for these generators. The results give realization of  $B_{\mathfrak{m} 2}$  type finite W-algebras.

Key words:  $B_{\mathfrak{m} 2}$  type Lie algebras non-linear Lie algebras Kazhdan filtration finite W-algebras

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