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Noether 整环上的齐次复合Groebner基

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Homogeneous Composed Groebner Basis over Noetherian Domain

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摘要 复合是指将多项式的每一个变元用新的多项式替换.对于Noether整环上的多项式环,如果复合与项序相容并且是一组首幂积为排列幂的首1齐次多项式,那么Noether整环上齐次Groebner基计算与齐次复合可交换.

关键词: Noether整环 齐次复合Groebner基 合冲条件 S-多项式

Abstract: Composition is the operation of replacing variables in a polynomial with other polynomials. For Noetherian domain, homogeneous composition and Groebner basis computation is commutative if composition is compatible with the term ordering and it is a list of monic homogeneous polynomial with its monic powering product being a permuted powering.

Key words: Noetherian domain homogeneous composed Groebner basis syzygy condition S-polynomials

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