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利用Lie群方法求Burgers-Huxley方程行波类首次积分

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To Solve the First Integral of the Burgers-Huxley Travelling Wave Solution Equations by the Method of Lie Groups

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- 摘要
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摘要 本文运用Lie群理论, 证明了Burgers-Huxley方程的行波解所满足的二阶非线性方程在参数满足一定关系时, 在经典意义下接受一个两参数Lie群, 此时可用积分法求其首次积分.

关键词： Burgers-Huxley方程   单参数Lie群   首次积分

Abstract： When the parameters satisfy certain relations, that the second order nonlinear autonomous system which the travelling wave solution of the Burgers-Huxley equations satisfied admits two-parameter Lie group in classical sense is proved in the paper by the theory of Lie groups. The first integral of the system is solved by the method of integration.

Key words： Burgers-Huxley equation   one-parameter Lie group   first integral

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