Accepted Manuscript

Lie symmetries, conservation laws and analytical solutions for two-component integrable equations

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PII:S0577-9073(17)30086-2DOI:10.1016/j.cjph.2017.03.008Reference:CJPH 203

To appear in: Chinese Journal of Physics

Received date:31 January 2017Revised date:8 March 2017Accepted date:9 March 2017

Please cite this article as: Lian-Li Feng, Shou-Fu Tian, Tian-Tian Zhang, Jun Zhou, Lie symmetries, conservation laws and analytical solutions for two-component integrable equations, *Chinese Journal of Physics* (2017), doi: 10.1016/j.cjph.2017.03.008

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Highlights

- We study coupled potential KdV equation and modified KdV-type equation.
- The vector fields and optimal systems are derived of the two integrable equations.
- We obtain their symmetry reductions and conservation laws via the optimal systems.
- A kind of explicit power series solutions for the equations are well constructed.

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