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An Extended Method for Constructing Travelling Wave Solutions to Nonlinear Partial Differential Equations

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Abstract: In this paper, an extended method is proposed for constructing new forms of exact travelling wave solutions to nonlinear partial differential equations by making a more general transformation. For illustration, we apply the method to the asymmetric Nizhnik-Novikov-Vesselov equation and the coupled Drinfel'd-Sokolov-Wilson equation and successfully cover the previously known travelling wave solutions found by Chen's method [Y. Chen, et al. Chaos, Solitons and Fractals 22 (2004) 675; Y. Chen, et al. Int. J. Mod. Phys. C 4 (2004) 595].

PACS: 02.30.Jr Key words: soliton solution, asymmetric Nizhnik-Novikov-Vesselov equation, coupled Drinfel'd-Sokolov-Wilson equation

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