

A General ANNV Family with a Common Special Kac-Moody-Virasoro Symmetry Algebra

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A general asymmetric Nizhnik-Novikov-Veselov (ANNV) family with an arbitrary function of high order group invariants is proposed. It is proved that the general ANNV family possesses a common infinite dimensional Kac-Moody-Virasoro symmetry algebra. The Kac-Moody-Virasoro group invariant solutions and the Kac-Moody group invariant solutions of the ANNV family are also studied. — PACS: 02.30.Jr, 02.30.Ik, 05.45.Yv.

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