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**On integrability of a special class of two-component (2+1)-dimensional hydrodynamic-type systems.** (English) [Zbl 1160.37398](#)

SIGMA, Symmetry Integrability Geom. Methods Appl. 5, Paper 011, 10 p. (2009).

Summary: The particular case of the integrable two component (2+1)-dimensional hydrodynamical type systems, which generalises the so-called Hamiltonian subcase, is considered. The associated system in involution is integrated in a parametric form. A dispersionless Lax formulation is found.

**MSC:**

**37K10** Completely integrable infinite-dimensional Hamiltonian and Lagrangian systems, integration methods, integrability tests, integrable hierarchies (KdV, KP, Toda, etc.)

**35Q53** KdV equations (Korteweg-de Vries equations)

Cited in 4 Documents

**Keywords:**

hydrodynamic-type system; dispersionless Lax representation

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