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Integrable couplings of the multi-component Dirac hierarchy and its Hamiltonian structure.
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The authors obtain multi-component integrable couplings of the Dirac hierarchy by using the vector loop algebra \tilde{G}_M . Then, according to the quadratic-form identity, the Hamiltonian structure of the above system is presented.

Reviewer: [Messoud A. Efendiev \(Berlin\)](#)

MSC:

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

Cited in **6** Documents

Keywords:

[multi-component Dirac hierarchy](#); [Hamiltonian structure](#); [loop algebra](#)

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