Dispersionless Harry-Dym Hierarchy Reductions of Dispersionless Harry-Dym Hierarchy

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Abstract

We investigate the reductions of dispersionless Harry-Dym hierarchy to systems of finitely many partial differential equations. These equations must satisfy the compatibility condition and they are diagonalisable and semi-Hamiltonian. By imposing a further constraint, the compatibility is reduced to a system of algebraic equations, whose solutions are described.