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An Effective Method for Seeking Conservation Laws of Partial Differential Equations

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Abstract: This paper introduces an effective method for seeking local conservation laws of general partial differential equations (PDEs). The well-known variational principle does not involve in this method. Alternatively, the conservation laws can be derived from symmetries, which include the symmetries of the associated linearized equation of the PDEs, and the adjoint symmetries of the adjoint equation of the PDEs.

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