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Mei Symmetry and Noether Symmetry of the Relativistic Variable Mass System

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Abstract: The definition and criterion of the Mei symmetry of a relativistic variable mass system are given. The relation between the Mei symmetry and the Noether symmetry of the system is found under infinitesimal transformations of groups. The conserved quantities to which the Mei symmetry and Noether symmetry of the system lead are obtained. An example is given to illustrate the application of the result.

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