

Two extensions of 1D Toda hierarchy

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The extended Toda hierarchy of Carlet, Dubrovin and Zhang is reconsidered in the light of a 2+1D extension of the 1D Toda hierarchy constructed by Ogawa. These two extensions of the 1D Toda hierarchy turn out to have a very similar structure, and the former may be thought of as a kind of dimensional reduction of the latter. In particular, this explains an origin of the mysterious structure of the bilinear formalism proposed by Milanov.

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