

عنوان مقاله:

Multi-lump solutions to the KPI equation with a zero degree of derivation

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خلاصه مقاله:

We construct solutions to the Kadomtsev-Petviashvili equation (KPI) by using an extended Darboux transform. From elementary functions we give a method that provides different types of solutions in terms of wronskians of order N . For a given order, these solutions depend on the degree of summation and the degree of derivation of the generating functions. In this study, we restrict ourselves to the case where the degree of derivation is equal to 0. In this case, we obtain multi-lump solutions and we study the patterns of their modulus in the plane (x,y) and their evolution according to time and parameters.

کلمات کلیدی:

Kadomtsev Petviashvili, wronskians, lump

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