ICM 1998, Berlin, Aug. 18–27

Abstracts of Short Communications and Posters

Section:

10. Partial Differential Equations

1991 MS Classification: 35

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Long-time asymptotic behaviour of non-decaying solutions of KP-type equations

The existence of non-decaying solutions of equations of Kadomtsev–Petviashvili (KP) type: KP, modified KP, and Gardner equations is proved. These solutions are bounded and vanish as $x \to +\infty$, but do not vanish as $x \to -\infty$ for all fixed y and t. It is proved, that constructed solutions are represented in the form of infinite sum of solitons with curved lines of constant phase in the neighbourhood of the leading edge up to the deviation vanishing as $t \to \infty$. The various examples of the curved asymptotic solitons are presented.