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; 4.2 Modified KdV Equation. Backlund Transformations
; 4.3 More on Modified GD Equations ;
Chapter 5 The KP Hierarchy ; 5.1 Definition of the
KP Hierarchy
5.2 Reduction of the KP Hierarchy to GD

Sommario/riassunto

The theory of soliton equations and integrable systems has developed rapidly during the last 30 years with numerous applications in mechanics and physics. For a long time, books in this field have not been written but the flood of papers was overwhelming: many hundreds, maybe thousands of them. All this output followed one single work by Gardner, Green, Kruskal, and Mizura on the Korteweg-de Vries equation (KdV), which had seemed to be merely an unassuming equation of mathematical physics describing waves in shallow water. Besides its obvious practical use, this theory is attractive also bec
