

Bright and dark positon solutions of the $(1 + 1)$ -dimensional Hirota and the Maxwell–Bloch equations

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In this work, we study the $(1 + 1)$ -dimensional Hirota and the Maxwell–Bloch equations. Using the Darboux transformation method, we constructed soliton solutions. Then will apply this method and get bright and dark positon solutions of the $(1 + 1)$ -dimensional Hirota and the Maxwell–Bloch equations.

KEYWORDS: Hirota and the Maxwell–Bloch equations, soliton solutions, Darboux transformation.