

Bright and Dark Positon Solutions of the 2+1-Dimensional Hirota-Maxwell-Bloch Equation

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ABSTRACT

In this talk, we consider one of the 2+1-dimensional nonlinear equation of the so-called the Hirota-Maxwell-Bloch equation (HMBE). We derived the one-fold, two-fold and N-fold Darboux transformation of this equation. Using Darboux transformation, we construct bright and dark position solutions of the HMBE.