

# Application of the Weierstrass Elliptic Expansion Method to the Long-Wave and Short-Wave Resonance Interaction System

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With the aid of symbolic computation, nine families of new doubly periodic solutions are obtained for the (2+1)-dimensional long-wave and short-wave resonance interaction (LSRI) system in terms of the Weierstrass elliptic function method. Moreover Jacobian elliptic function solutions and solitary wave solutions are also given as simple limits of doubly periodic solutions.

*Key words:* Weierstrass Elliptic Expansion Method; LSRI System.

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