

# The (2+1) and (3+1)-Dimensional CBS Equations: Multiple Soliton Solutions and Multiple Singular Soliton Solutions

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In this work, the generalized (2+1) and (3+1)-dimensional Calogero-Bogoyavlenskii-Schiff equations are studied. We employ the Cole-Hopf transformation and the Hirota bilinear method to derive multiple-soliton solutions and multiple singular soliton solutions for these equations. The necessary conditions for complete integrability of each equation are derived.

*Key words:* Calogero-Bogoyavlenskii-Schiff Equations; Hirota's Method; Multiple Solitons; Multiple Singular Solitons.