

Super extension of Bell polynomials with applications to supersymmetric equations

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Abstract:

We generalize classical Bell polynomials into a super version, which are found to be effective in systematically constructing super bilinear representation, bilinear Backlund transformation, Lax pair and infinite conservation laws of supersymmetric equations. We take supersymmetric KdV equation and supersymmetric sine-Gordon equation to illustrate this procedure.

References:

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