

MULTISTEP  $\varepsilon$ -ALGORITHM AND SHANKS' TRANSFORMATION  
BY HIROTA'S METHOD

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In this paper, we propose a multistep extension of the Shanks' sequence transformation [2, 3]. It is defined as a ratio of determinants. Then, we show that this transformation can be recursively implemented by a multistep extension of the  $\varepsilon$ -algorithm of Wynn [4]. Some of their properties are specified. These results are obtained by using the Hirota's bilinear method [1], a procedure quite useful in the solution of nonlinear partial differential and difference equations.

## References

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