

## Guidelines for Abstract

- The abstract must be in English. Use single-spacing, font type 'Times New Roman' and font size 12.
- The title should be in bold letters.
- Title should be followed by the names of authors (with an asterisk next to the name of the corresponding author), organizational affiliation(s), name(s) of city and country, and e-mail address for the contact author.
- The abstract should state concisely the methods, results and conclusion of the paper.
- The content of abstract must be fit in one page of A4. (30 line or 480 words)
- A list of key words (maximum of four) must be included after the text.
- The abstract must be submitted as a PDF file.

ABSTRACTS THAT DO NOT FOLLOW THE GUIDELINES MAY NOT BE ACCEPTED.

## A sample abstract

### **Fourier Spectral Methods for Solving The Korteweg-De Vires Equation**

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The Korteweg –de Vires equation (KdV equation) is a model for shallow water waves which is nonlinear partial differential equation. In this work, we study about solving the equation using analytical approach and numerical method using the Fourier spectral methods (FSM) with and without integrating factor. Then we use FSM to solve forced KdV equation which is a model for free surface flow over an obstacle. However, FSM can be applied only for periodic condition. When a solution wave reaches a boundary of the domain, the wave appears in the another boundary and the solution wave perturbs the solution in the computational domain. To solve this difficulty, we use a buffer zone to absorb the unexpected wave solution before it reaches the boundary. The results show that this approach can absorb the solution wave in some particular cases.

**Keywords:** KdV equation, Fourier spectral methods, buffer zone