**On the Adomian Decomposition Method and its Applications to Mechanics**

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**Abstract.**

In this paper we review the Adomian decomposition method (ADM). We give general description of this method and we present some modifications for the standard Adomian decomposition method. Application is made to Blasius problem, a dissipative wave equation, and free vibration of Euler-Bernoulli beam. The results obtained have been discussed and shows the effectiveness of the method.

**Keywords:** Adomian decomposition method, Blasius equation, wave, vibration, Euler-Bernoulli beam.Impact