# Solution of Second Order Initial- Boundary Value Problems of Partial Integro-Differential Equations by using a New Transform: Mahgoub Transform

**ABSTRACT.** The partial integro-differential equations (PIDEs) have many possible applications in areas like mathematics, physics and engineering. Therefore, we develop a new transform, which was proposed by Mahgoub [1], for solving second order initial-boundary value problems (IBVPs) of PIDEs. This transform is characterized by its simplicity of use.

**Key words:** Integral transform, Mahgoub transform, Boundary value problems, Partial integro-differential equations.

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