A novel integral operator transform and its application to some FODE and FPDE with some kind of singularities

ABSTRACT

We introduced a novel integral transform operator. We proved the existence and the uniqueness of the relatively new operator. We presented some useful properties of the new operator. We presented the application of this operator for solving some kind of fractional ordinary and partial differential equation containing some kind of singularity.

Keyword: Integral operators; Integral transform; ITS applications; Ordinary and partial differential equations; Useful properties.