

# ADVANCES IN INTEGRAL TRANSFORMS AND ANALYSIS OF DIFFERENTIAL EQUATIONS WITH APPLICATIONS

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## DESCRIPTION

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Integral transforms map equations from one domain into another domain that might be manipulated or solved more easily. Although the theory of integral transforms is not new, it is still worthy for further research work in theory and applications. Having in mind the very useful properties of integral transforms in diverse areas of mathematics, applied mathematics, mathematical physics, engineering, astronomy, differential equations, stochastic processes, and statistical sciences, our main objective in this special issue of [Demonstratio Mathematica](#) is to address some interesting advances in the theory of integral transforms and their application in solving differential equations and applied science research problems.

This special issue will focus on recently developed treatments encompassing the following:

- ▶ Sumudu, natural, Struve, Fourier Bessel, Fresnel, wavelet, Fourier, Laplace, Mellin, Stieltjes
- ▶ Whittaker, Hilbert, etc., and allied integral transforms and their recent variants
- ▶ Fox H-integral transforms and applications
- ▶ Fractional integral transforms of several types
- ▶ Integrals involving kernels of various types including trigonometric, hyperbolic, hypergeometric, gamma, Bessel, modified Bessel, Struve, hypergeometric types, Fox-Wright etc.
- ▶ Integral and Fractional order integrals and their applications to fractional-order differentia and differintegral equations
- ▶ q-integral transforms involving q-special functions
- ▶ Applications involving q-series and q-polynomials
- ▶ Integral transforms of generalized functions
- ▶ and other related topics

Authors are requested to submit their full revised papers complying the general scope of the journal. The submitted papers will undergo the standard peer-review process before they can be accepted. Notification of acceptance will be communicated as we progress with the review process.

## HOW TO SUBMIT

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Before submission authors should carefully read the [Instruction for Authors](#).

Manuscripts can be written in TeX, LaTeX (strongly recommended) - the journal's [LATEX template](#). Please note that we do not accept papers in Plain TEX format. Text files can be also submitted as standard DOCUMENT (.DOC) which is acceptable if the submission in LATEX is not possible. **For an initial submission, the authors are strongly advised to upload their entire manuscript, including tables and figures, as a single PDF file.**

All submissions to the Special Issue must be made electronically via online submission system Editorial Manager: <https://www.editorialmanager.com/dema/>

All manuscripts will undergo the standard peer-review process (single blind, at least two independent reviewers). When entering your submission via online submission system please choose the option "***Special Issue on Adv. Integr. Tranf. and Anal. Differential Equ. with Appl.***".

Submission of a manuscript implies that the work described has not been published before and it is not under consideration for publication anywhere else.

**The deadline for submissions is 20th June 2022**, but individual papers will be reviewed and published online on an ongoing basis.

Contributors to the Special Issue will benefit from:

- ▶ critical peer-review
- ▶ no space constraints
- ▶ quick online publication upon completing the publishing process (**continuous publication model**)
- ▶ content converting to xml
- ▶ better visibility due to **Open Access** – free, unrestricted and permanent access to all the content
- ▶ **liberal policies on copyrights** (authors retain copyrights) and on self-archiving (no embargo periods)
- ▶ promotion of published papers to readers and citers
- ▶ **long-term preservation** – content archiving with [Portico](#)

We are looking forward to your submission!

In case of any question please contact Dr. Justyna Żuk (Managing Editor; [Justyna.Zuk@degruyter.com](mailto:Justyna.Zuk@degruyter.com)).