

Call for Papers



International Journal of Dynamical Systems and Differential Equations

Special Issue on: "Differential, Difference and Dynamic Equations"

Guest Editors:

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The aim of this special issue is to bring together recent and relevant results in the area of differential, difference and dynamic equations on time scales. Potential topics include, but are not limited to: stability theory, oscillation theory, dynamical systems, periodicity, almost periodicity and almost automorphicity.

These three equations play important role for modelling important phenomena in the environment. Among them, the theory of dynamic equations on time scales is the most recent and was introduced by Stefan Hilger in his PhD thesis in 1988 with three main features: unification, extension and discretization. Since a time scale is any closed and nonempty subset of the real numbers set, it is always possible, through this theory, to extend known results from continuous and discrete analysis to a more general setting. As a matter of fact, this theory allows us to consider time scales which possess hybrid behaviours (both continuous and discrete). These types of time scales play an important role for applications, since most of the phenomena in the environment are neither only discrete nor only continuous, but they possess both behaviours. Further, this theory allows us to extend the results to quantum calculus, which is a very important branch of the time scales theory with many applications to quantum physics, black holes, quantum mechanics, among others.

Subject Coverage

Suitable topics include, but are not limited, to the following:

- Dynamic equations on time scales
- Differential equations
- Difference equations
- Integral equations
- Stability theory
- Oscillation theory
- Periodicity
- Almost periodicity
- Almost automorphicity
- Dynamical systems

Notes for Prospective Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. (N.B. Conference papers may only be submitted if the paper has been completely re-written and if appropriate written permissions have been obtained from any copyright holders of the original paper).

All papers are refereed through a peer review process.

All papers must be submitted online. To submit a paper, please read our Submitting articles page.

Important Dates

Manuscripts due by: *31 July, 2020* Notification to authors: *20 August, 2020* Final versions due by: *20 September, 2020*