Mittag-Leffler Function: Generalizations and Applications

Guest Editor:

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Message from the Guest Editor

Since the seminal works of the Swedish mathematician Gösta Magnus Mittag-Leffler (1902–1905), where he introduced his famous function as a power series, many generalizations and applications of the Mittag-Leffler function have been published in the literature.

Among the most important generalizations, we found the two-parametric Mittag-Leffler function (introduced and studied by Agarval and Humbert in 1953, and independently by Djrbashyan in 1954), the three parametric Mittag-Leffler function (introduced by Prabhakar in 1971), and other generalized Mittag-Leffler functions (introduced more recently by Kilbas and Saigo in 1995). Nevertheless, the most relevant applications come from the special role of the Mittag-Leffler function in Fractional Calculus (known as "The Queen Function of the Fractional Calculus").

The scope of this Special Issue is to publish recent papers about new generalizations and applications of the Mittag-Leffler function, Also, papers describing the new analytic and asymptotic properties of this function, as well as its connection to other special functions, are welcome.

Special Issue