

*Efficient methods for Volterra integro-differential equations
based on Floater-Hormann interpolants*

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One of the conventional and beautiful ways for the numerical solution of Volterra integro-differential equations (VIDEs) can be obtained using a combination of finite differences and quadrature rules, which, because of their efficiency, accuracy, and simplicity for the implementation, play an important role in the numerical study of such equations. This talk is devoted to deriving a highly accurate and stable scheme which is composed of left one-sided barycentric rational finite differences for approximating the derivative term and the composite barycentric rational quadrature for approximating the integral term.