

Generalized Adams methods to solve fractional differential equations with delay

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In this talk, we use the fractional convolution quadrature based on generalized Adams methods to get a numerical solvers for fractional differential equations with delay. The convergence of the method is proved by the inverse of matrix. We also get the numerical stability region based on generalized Adams methods and Adams methods. The linear stability properties of generalized Adams methods when applied to linear fractional delay differential equation is studied. The numerical experiments confirm the valuable properties of this approach.