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Title: A method for accelerated computation of the Riemann zeta function on the complex plane

Author(s): Igoris Belovas, Leonidas Sakalauskas and Vadimas Starikovičius

The paper extends the study of efficient algorithms for the computation of the Riemann zeta function on the complex plane. It is dedicated to numerical aspects of the implementation of the algorithm. Since the straightforward computation of the coefficients of the method is difficult and time-consuming, we propose a new perspective, taking into account the asymptotic normality of the coefficients. We show that the presented approach accelerates computations of the Riemann zeta function. To increase the performance, we propose several modifications of the algorithm for the Riemann zeta function. We compare both ordinary and parallel versions and evaluate accuracy, efficiency, and speedup.

Address:
Igoris Belovas
Institute of Data Science
and Digital Technologies
Vilnius University
Akademijos str. 4
LT-04812 Vilnius
Lithuania

Address:
Leonidas Sakalauskas
Klaipėda University
LT-92294 Klaipėda
Lithuania

Address:
Vadimas Starikovičius
Vilnius Gediminas Technical University
LT-10223 Vilnius
Lithuania