

Reliable Numerical Methods for Mathematical Problems*

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Abstract

The latest results obtained by interval arithmetic based guaranteed reliability numerical techniques are reported for some problems of circle packing [2, 3], chaos verification and location [1], and on an open conjecture of Wright for delay differential equations. Both the applied computational methods and the consequences of the results will be discussed in detail.

Keywords: Interval arithmetic, Chaos, Pendulum, Circle packing, Delay differential equation, Global optimization

MSC: 90C30, 65K10

References

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