Numerical approximation of the Mittag–Leffler function for large sparse low rank matrices

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The evaluation of matrix functions and, in particular, the numerical computation of the Mittag-Leffler (ML) functions, is a current topic at the moment. Here we discuss relevant issues related to this topic, with a special focus on large sparse low rank matrices. The conditioning of the ML function, which is an essential tool to assess the quality of the approximation, is also addressed. We illustrate our findings with some numerical tests which support our results.

Joint work with R. Garrappa *and* T. Politi

References

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