

MultiPrecisionArrays.jl: A Julia package for iterative refinement

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Summary

What is iterative refinement?

Statement of need

Who cares?

Mathematics

$$Ax = b$$

Test citations

Kelley ([2022b](#)) is a book. Kelley ([2022a](#)) is a paper.

Kelley ([2023](#)) is the newest paper

References

Kelley, C. T. (2022a). Newton's method in mixed precision. *SIAM Review*, 64, 191–211. <https://doi.org/10.1137/20M1342902>

Kelley, C. T. (2022b). *Solving Nonlinear Equations with Iterative Methods: Solvers and Examples in Julia*. SIAM. ISBN: 978-1-611977-26-4

Kelley, C. T. (2023). *Newton's method in three precisions*. <https://arxiv.org/abs/2307.16051>