

“Speed Testing of Attitude Estimation Algorithms” Yang Cheng and Malcolm D. Shuster, submitted to *The Journal of the Astronautical Sciences*.

This work is in response to an article published in 2000 by Markley and Mortari which claimed that the QUEST algorithm was slower than the ESOQ1 and ESOQ2 algorithms of Mortari. The present work shows instead that QUEST is as fast as any fast optimal estimator of the attitude and shows this for a much more complete set of criteria and environments than the work by Markley and Mortari. In fact, QUEST was generally faster than any of the ESOQ1 and ESOQ2 algorithms of Mortari except for one very special case, which just happened to be the only case in which QUEST had been compared with the ESOQ1 and ESOQ2 algorithms of Mortari.

See also 2007a for a critique of the accuracy and robustness tests of Markley and Mortari.

QUEST lives!

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