

Reproducibility and Uncertainty in High Performance Computing

An SC17 Panel

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How to *identify* sources of uncertainty in computations?

How to *quantify* all possible sources of error or uncertainty in (scientific) computations? How to report?

What *standards* should we develop for reproducibility in the high performance computing context?

What *infrastructure* is needed to enable and support these standards? including repositories and cyberinfrastructure.

What *funding* and/or *institutional support* is needed to enable and support these standards? training?

What can or should *publishers and conferences* be doing to encourage reproducible research practices?