

Question: Is it important that NSF provision world class leadership computing/data analysis systems.

Votes – 16 Yes; 2 No; 1 yes/undecided

Comments

Only if NSF cares to keep its best scientists and world leadership

No – Unless no other public agency does

No – We should define the “world class”, not just follow

Yes – without doubt

Yes – to fulfill NSF’s mission to support world class leadership research some form of leadership class HPC resources must be funded. What NSF’s definition of leadership class does not have to equal other federal agencies [definitions].

Yes – I think there should 1 to 3 to match DOE and European/Japan countries. This is critical to advancing US Science.

Yes – cf Lax Report, 1982

Yes – and there should be more than one

Yes – if NSF can secure large funding resources

Yes – important for open science – maintain leadership in computational science and engineering.

Yes – as part of a multi-center cyber infrastructure program

Yes – NSF should field a leadership class machine, however this is somewhat dependent on the total resources budget. For example, if the budget support only a leadership class systems that serves only a small number of users than that would not be advisable.

Yes – Resounding Yes. Reasons:

1. Europe has invested in not only but four Petascale Class Supercomputers. They full US university ecosystem has access to only one Petascale class supercomputer. This already shows that the US is falling behind. We cannot afford to fall behind further.
2. Access to Petascale resources is also a lot easier for the Europeans. This is a genuine problem.
3. India and China are in the process of getting Petascale class machines.

4. The intellectual motivation for getting to the Exascale first in the US is very compelling.
5. Questions of great intellectual interest, as well as questions of profound technological importance hinge on availability of leadership class computing and analysis resources.

Yes – the NSF provides broad support for research and all disciplines should have access to apply for allocations in leadership class systems. Computation is becoming more broadly and deeply embedded in research across an increasing number of disciplines. It would be unfortunate if certain areas were starved of access to leadership class systems because their research did not fit into the narrower missions of other funding agencies. The peer review process should be used to determine such access.

Yes, Yes, Yes, Yes