Beyond Exascale Computing Panel (Frank's Personal View)

or

HP

The Good
The Bad
The Ugly

The Good:

We never had such a thorough discussion of technologies going forward towards EC and beyond (with reality checks included)

The Bad:

**We are still far from a canonical architecture for EC and BEC.
That would be helpful (or mandatory) for more standardized S/W environments**

The Ugly

Many discussions ignore that future system architectures have to be "sold" by vendors at a decent margin or the vendor will go out of business or kill the product.

In certain cases the taxpayer will help

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Keeping that in mind I see three system categories for EC/BEC:

1. General Purpose Heroic Effort Systems
    (see National / EU Initiatives)
2. Special Purpose Systems for Special Apps
    (Quantum Computing / Dedicated ASICs etc.)
3. The Exascale Beowulf
    (Modular Building Blocks @ ~1 to ~10 PF, compute with   electrons, transmit with photons, store with ions et al.)

Thank you