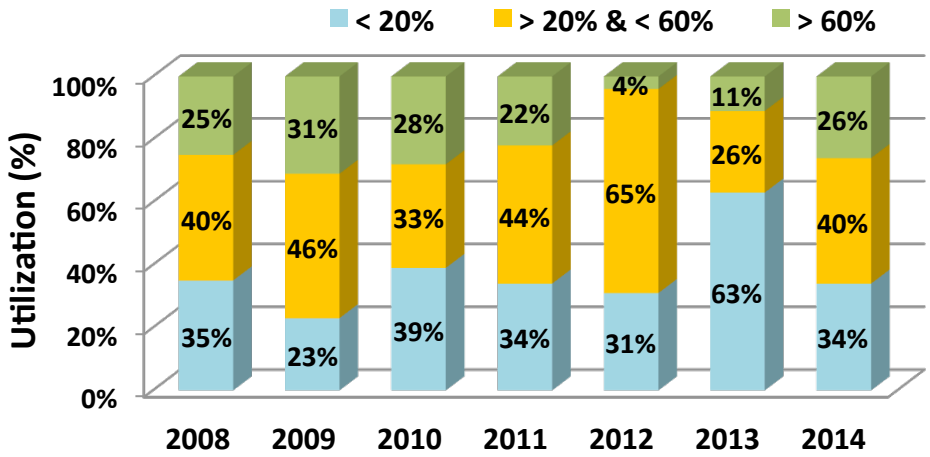
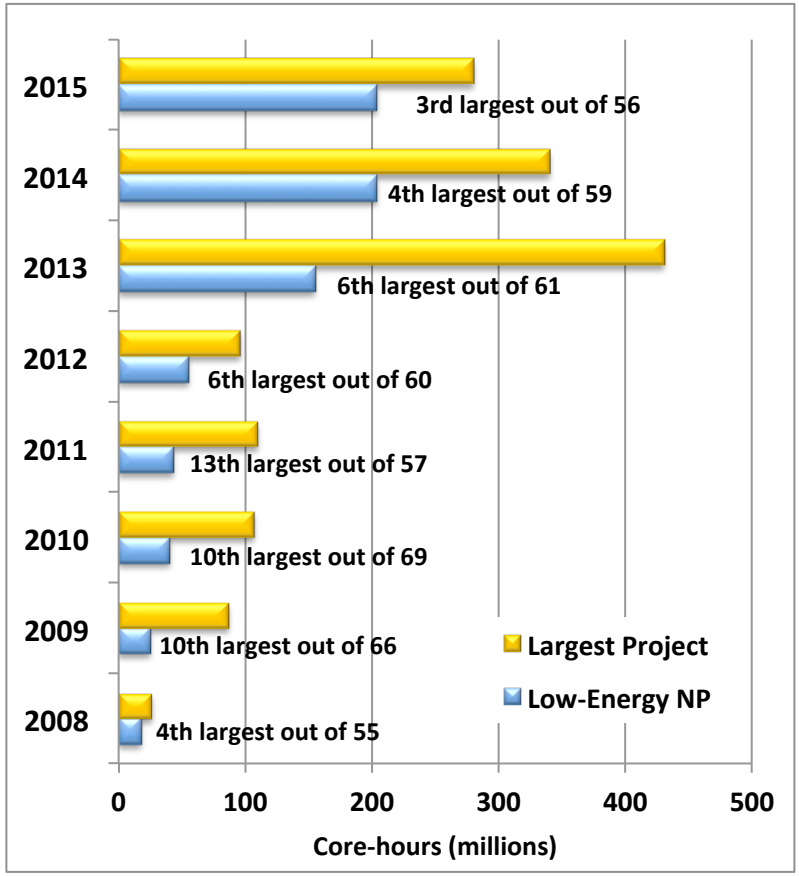
NUCLEI/UNEDF Leadership-class computing

- SciDAC collaborations between applied mathematicians, computer scientists, and nuclear physicists lead to efficient utilization of leadership-class computing resources for nuclear physics problems
- Significant accomplishments in NUCLEI/UNEDF, achieved through leadership-class computing
  - *Ab-initio* calculations of C-12
  - Understanding the long lifetime of C-14
  - *Ab-initio* calculations of Ca-54
  - Improved energy-density functionals
  - Quantifying the limits of nuclear existence
- Typically, > 60% of the computing resources are used at leadership-class scale (utilization @ OLCF)



INCITE Allocation Trends 2008 – 2015



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