



Type: Renewal
Title: "Nuclear Structure and Nuclear Reactions"

Principal Investigator: James Vary, Iowa State University
Co-Investigators: Joseph Carlson, Los Alamos National Laboratory
Gaute Hagen, Oak Ridge National Laboratory
Pieter Maris, Iowa State University
Hai Ah Nam, Los Alamos National Laboratory
Petr Navratil, TRIUMF
Witold Nazarewicz, University of Tennessee, Knoxville
Steven Pieper, Argonne National Laboratory
Nicolas Schunck, Lawrence Livermore National Laboratory

Scientific Discipline: Physics: Nuclear Physics

INCITE Allocation: **184,000,000 processor hours**
Site: Argonne National Laboratory
Machine (Allocation): IBM Blue Gene/Q (80,000,000 processor hours)
Site: Oak Ridge National Laboratory
Machine (Allocation): Cray XK7 (104,000,000 processor hours)

Largest award on Titan

2016 Top 5 awards by size out of 56 awards

Rank and millions of cpu hours

1. 354 – Modeling Advanced Coal-Fired Boiler
2. 280 – Lattice QCD
3. 200 – Quantum Chemistry
4. 190 – Earthquake simulation
5. **184 – Nuclear Physics**