



# International Conference Nuclear Theory in the Supercomputing Era 2013

**In Honor of James P. Vary**

The conference focuses on forefront challenges in physics, namely the fundamentals of nuclear structure and reactions, the origin of the strong inter-nucleon interactions from QCD, the nonperturbative regime of relativistic quantum field theory, and computational nuclear physics with leadership class computer facilities to provide forefront simulations leading to new discoveries.

## Important dates

March 1 – Early registration  
April 15 – Hotel reservations

## Scientific Advisory Committee

Bruce Barrett (Chair), University of Arizona  
Stan Brodsky, SLAC, Stanford University  
Ümit Çatalyürek, Ohio State University  
Mark Caprio, University of Notre Dame  
David Dean, Oak Ridge National Laboratory  
Jerry Draayer, Louisiana State University  
John Hiller, University of Minnesota-Duluth  
Morten Hjorth-Jensen, U. of Oslo & Michigan State U.  
Youngman Kim, Institute for Basic Science, South Korea  
Ruprecht Machleidt, University of Idaho  
Alexander Mazur, Pacific National University, Russia  
Petr Navrátil, TRIUMF, Canada  
Witold Nazarewicz, U. of Tennessee & Oak Ridge National Lab  
Esmond Ng, Lawrence Berkeley National Laboratory  
Giuseppina Orlandini, University of Trento, Italy  
Erich Ormand, Lawrence Livermore National Lab  
Takaharu Otsuka, University of Tokyo, Japan  
Steve Pieper, Argonne National Laboratory  
Wayne Polyzou, University of Iowa  
Jianwei Qiu, Brookhaven National Laboratory  
Sofia Quaglioni, Lawrence Livermore National Lab  
Andrey Shirokov, Moscow State University, Russia  
Masha Sosonkina, Old Dominion University  
James Vary, Iowa State University

## Topics and Keynote Speakers

Ab initio nuclear structure  
*Gaute Hagen*, Oak Ridge National Laboratory

Microscopic approaches to nuclear reactions  
*Petr Navrátil*, TRIUMF, Canada

Origin and properties of strong inter-nucleon interactions  
*Ruprecht Machleidt*, University of Idaho

Light-front quantum field theory  
*Stan Brodsky*, SLAC-Stanford

Computational science and applied mathematics  
*Esmond Ng*, Lawrence Berkeley National Laboratory

## Special talks

*Martin Savage*, U. of Washington – Keynote talk, Lattice QCD  
*Bruce Barrett*, U. of Arizona – Conference summary  
*James Vary*, Iowa State U. – Distinguished lecture

## Organizing Committee

Bruce Barrett (Co-Chair), University of Arizona  
Kristina Launey, Louisiana State University  
Pieter Maris (Co-Chair), Iowa State University  
Jianwei Qiu, Brookhaven National Laboratory  
Joseph Shinar, Iowa State University  
Andrey Shirokov (Co-Chair), Moscow State University  
Masha Sosonkina, Old Dominion University  
Kirill Tuchin, Iowa State University  
Xingbo Zhao, Iowa State University

**IOWA STATE  
UNIVERSITY**

**Iowa State University, Ames, Iowa**  
**May 13 - 17, 2013**  
**[www.cpm.iastate.edu/ntse2013](http://www.cpm.iastate.edu/ntse2013)**

## Sponsors

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