**David J. Dean**

Oak Ridge National Laboratory

Bldg. 5700 MS 6369

P.O. Box 2008

Oak Ridge, TN 37831-6369 USA

e-mail: deandj@ornl.gov

phone : (865) 576-5229

Cell : (865) 567-1365

**Education and Post-doctoral training**

Post Doctoral Fellow in Physics, 1992 – 1995, California Institute of Technology

Ph.D.: 1991, M.S.: 1989, Vanderbilt University, Department of Physics, Nashville, TN

B.S.: 1985, University of Tennessee, at Chattanooga, Chattanooga, TN

**Positions**

* 2020 – present, PI/Director, Quantum Science Center, ORNL
* 2018 – 2020, Associate Laboratory Director, Physical Sciences Directorate, ORNL
* 2011 – 2018, Director, Physics Division and ORNL Isotope Program
* 2009 – 2011, Senior Advisor to the Under Secretary of Science, U.S. Department of Energy
* 2007 – 2009, Director, Office of Institutional Planning, ORNL
* 2004 – 2009, Distinguished R&D Staff, 2002 – 2004 Senior R&D Staff, 1997 – 2002 R&D Staff, 1995 – 1997, Wigner Fellow, Physics Division, Oak Ridge National Laboratory, Oak Ridge, TN
* 2003 – 2009 Nuclear Theory Group Leader, 2001 – 2003 Nuclear Theory Task Leader, Physics Division, Oak Ridge National Laboratory, Oak Ridge, TN

**Publications, specializations and Professional Societies**

* 204 publications including 112 refereed journal articles
* 169 talks at international workshops/conferences
* Main Fields: theoretical nuclear physics, quantum many-body problems, computational physics
* Fellow of the American Physical Society (2004)
* Fellow of the Institute of Physics (London) (2011)
* Fellow of the American Association for the Advancement of Science (2016)

**National Boards, Committees, and Professional Societies**

1. 2016-2019, Vice-Chair, Chair Elect, Chair, and Past-Chair of the Division of Nuclear Physics, American Physical Society
   1. 2016, Chair, APS nominating committee
   2. 2017, Chair, DNP Program Committee
   3. 2018, Chair, DNP Dissertation Award Committee
   4. 2019, Chair, DNP Fellowship Committee
2. 2015 – 2018, Jefferson Laboratory Program Advisory Committee
3. 2015 – 2018, Facility for Rare Isotope Beams (FRIB) Scientific Advisory Committee, Chair
4. 2015 – 2018, GRETA Scientific Advisory Committee
5. 2012 – 2018, FRIB-Theory Alliance Steering Committee
6. 2011 – 2018, Majorana Demonstrator Scientific Advisory Committee
7. 2009 – 2014, National Superconducting Cyclotron Laboratory (NSCL) Program Advisory Committee
8. 2008 – 2014, Division Associate Editor for Nuclear Physics, Physical Review Letters
9. 2006 – 2011, Associate Director, Japan-U.S. Theory Institute for Physics with Exotic Nuclei (JUSTIPEN, in Tokyo)
10. 2010, Co-chair, Fast Track Action Committee on Computational Modeling and simulation, Committee on Technology, National Science and Technology Council, Office of Science and Technology Policy
11. 1999 – 2008, National Energy Research Scientific Computing Center (NERSC) Users Group Executive Committee, Chair, 2005 – 2008
12. 2005 – 2008, LBNL NERSC Policy board
13. American Physical Society, Division of Nuclear Physics
    1. 2013 – 2014, Bonner Prize Committee
    2. 2006 – 2007, Nominating Committee
    3. 2000 – 2003, Program Committee
    4. 2004 – 2008, National Nuclear Physics Summer School Steering Committee, Vice Chair 2005, Chair 2006, Past Chair 2007
14. DOE/NSF Nuclear Science Advisory Committee
    1. 2019, Subcommittee on Quantum Information Science in Nuclear Physics
    2. 2015, Long Range Plan Writing Group
    3. 2012, Office of Nuclear Physics Committee of Visitors
    4. 2007, Long Range Plan Writing Group
    5. 2006 – 2007, FRIB Task force
    6. 2003 – 2007, Member of NSAC
15. 2006, Member of the DOE Advanced Scientific Computing Advisory Committee (ASCAC) subcommittee on Facilities Performance Measures
16. 2002 – 2004, Member of the RIA Theory Working Group Steering Committee

**Awards and Adjunct Positions**

1. 2004 – 2010, Visiting Professor, University of Oslo, Centre of Mathematics for Applications
2. 2005 – 2015, Adjunct Professor, University of Tennessee, Department of Physics and Astronomy
3. 2008 and 2000, ORNL Research Accomplishment Award
4. 1997, Presidential Early Career Award for Scientists and Engineers
5. 1997, Department of Energy Young Scientist Award
6. 1995 – 1997, Wigner Fellow, Oak Ridge National Laboratory
7. 1987 – 1989, Graduate Fellowship: Oak Ridge Associated Universities Fellowship
8. 1983 – 1985, Undergraduate Fellowship: University of Chattanooga Foundation Fellowship

**Panel and Review Memberships**

1. 2017 GSI Laboratory Review, Darmstadt Germany
2. 2017 NSF PFC Review Panel
3. 2017 DOE HEP SciDAC Review Panel
4. 2014 – 2016, University of British Columbia Innovation Funds Internal Review Committee
5. 2015, DOE Review of the ANL ATLAS Scientific Program
6. 2015, NSF Math and Physical Sciences Open Data Workshop Advisory Board
7. 2015, DOE HEP/ASCR SciDAC Review
8. 2014, DOE/HEP CD-1 Review of the Lattice QCD IT project
9. 2013 – 2016, University of Chicago, Argonne National Laboratory Physical Science and Engineering Directorate Review Committee
10. 2013, DOE Review of the Texas A&M Cyclotron Institute Research Program
11. 2013, NSF Physics Frontier Center Proposal Panel Review
12. 2009, NSF PIRE Proposal Panel Review
13. 2009, CD-1 Review of Lattice QCD Computing project
14. 2008, DOE Mid-Range Laboratory Computing Panel, sponsored by SC/ASCR
15. 2008, NSF CDI Review Panel, Washington
16. 2007, NSF Nuclear Theory Proposal Review Panel
17. 2005, NSF Nuclear Theory Proposal Review Panel
18. 2004, Hafnium project review, Sandia National Laboratory
19. 2002, NSF Nuclear Physics site review committee for Florida State University
20. Referee, Physical Review Letters, Physical Review C, Physics Letters B, Nuclear Physics A, Reviews of Modern Physics, Physics Today, Reports on Progress in Physics, European Physical Journal

**Conference and Workshop Organization**

1. February 2017, Quantum Testbeds Stakeholder Workshop, Washington, DC, <https://www.orau.gov/qtsws/default.htm>
2. November 2016, Sixth International Conference on Fission and Properties of Neutron-rich nuclei, local organizing committee, Sanibel Island
3. July 2016, Nuclear Structure 2016, international advisory committee, Knoxville
4. April 2016, Looking beyond CMOS Technology for Future HPC, Organizing Committee, Hanover, Maryland
5. August 2015, Beyond Exascale: Qubits for Quantum Computing workshop, ORNL
6. September 2014, Materials Opportunities for Quantum Computing Workshop, LANL
7. September 2014, Smoky Mountains Computational and Engineering Conference, Gatlinburg, TN, <http://computing.ornl.gov/workshops/exascale14/agenda/>
8. September 2014, Fundamental Symmetries, Neutrinos, Neutrons and related Nuclear Astrophysics Long Range Plan Town Meeting, local organizing committee, Chicago, <http://fsnutown.phy.ornl.gov/fsnuweb/index.html>
9. June 2014, International Conference on Nuclear Theory in the Supercomputing Era – 2014, Scientific Advisory Committee
10. May 2013, International Conference on Nuclear Theory in the Supercomputing Era – 2013, Scientific Advisory Committee
11. December 2012, Symposium on Physics, Energy, Computing, and Cities, New York, <http://www.phy.ornl.gov/specc2012/>
12. October 2012, Fundamental Symmetries and Neutrinos Working Group providing input to the 2012 NSAC LRP Implementation Subcommittee, Chicago, <http://www.phy.ornl.gov/funsym>
13. June 2012, Horizons of Innovative Theories, Experiments, and Supercomputing in Nuclear Physics, Scientific Advisory Committee, Baton Rouge, LA
14. March 2011, Moderator for Supercomputing for Science and Competitiveness, American Chemical Society, Congressional Briefing
15. October 2010, DOE Simulations Summit, Washington, DC <http://science.energy.gov/ascr/community-resources/workshops-and-conferences/doe-simulations-summit/>
16. July 2010, Computational Materials Science and Chemistry: Accelerating Discovery and Innovation through Simulation-Based Engineering and Science, <http://science.energy.gov/bes/community-resources/reports/>
17. June 2009, Scientific Discovery through Advanced Computing Conference, San Diego, Program Committee
18. January 2009, Forefront Questions in Nuclear Science and the Role of High Performance Computing, Washington DC, co-chair, <http://extremecomputing.labworks.org/nuclearphysics/index.stm>
19. June – July 2008, Institute for Nuclear Theory Program: Atomic, Chemical, and Nuclear Developments in Coupled Cluster Methods, with R. Bartlett and W. Johnson \
20. October 2007, International Workshop on Electron Drivers for Radioactive Ion Beams, Organizing Committee
21. January 2007, Organizing committee for the Nuclear Astrophysics/Physics of Nuclei Long Range, Plan Town Meeting
22. July 2006, Local Organizing committee, Nuclear Structure 2006, ORNL
23. October 2006, Co-organizer APS-DNP Meeting, Nashville
24. September – December 2004, Institute of Nuclear Theory Program: Realistic Effective Interactions in Nuclei, Co-organizer (with Bruce Barrett, James Vary, and Morten Hjorth-Jensen)
25. September 2004, ENAM04, Pine Mountain, GA, Local Organizing Committee
26. June 2003, 15th National Nuclear Physics Summer School, Knoxville, Organizer (with Jeff Blackmon)
27. March 2002, Advanced Computational Methods for Solving the Nuclear Many-Body Problem, Organizer (with E. Ormand), Institute for Nuclear Theory (Seattle) workshop
28. September 2001, International Workshop on Advances in the Shell Model, Coordinator, Trento March 2001, ISOL'01, Local Organizing Committee, Oak Ridge, TN
29. June 1999, International Workshop on Advances in Shell-Model Studies in Nuclei Far from Stability, Coordinator, Trento
30. August 1998, Nuclear Structure 1998, Local Organizing Committee, Gatlinburg, TN
31. June 1998, International Workshop on Condensed Matter Theories XXII, Local organizing committee, Nashville, TN

**Classes Taught at the University of Tennessee**

1. Physics 643 (graduate, 8 grad, 1 undergrad)

Subject: Computational Quantum Many-Body Problems

Spring, 2002

2. Physics 573 (graduate)

Subject: Computational Physics

Spring, 2003 (6 grad), 2005 (6 grad)

**Students and Postdocs**

1. *Bogdan Mihaila*, 1998 – 1999

ORNL/UT postdoc (now at NSF)

2. *Bryan Barmore*, 1998 – 2000

UT/ORNL postdoc, joint with Witek Nazarewicz, now with NASA

3. *Andrius Juodagalvis*, August 2000 – 2004

ORNL/UT post-doc, now a professor in Luthuania

4. *Cem Ozen*, 1999 – 2005

University of Tennessee graduate student, now a professor in Turkey

6. *Gergana Stoitcheva*, 2002 – 2006

UT/ORNL post-doc, now at Deloitte

7. *Gaute Hagen*, 2005 – 2008

ORNL/UT post-doc, now R&D staff at ORNL