**Stefano Gandolfi**

- **Education:**
  - 2007: Ph.D. in Theoretical Physics, advisor Prof. F. Pederiva, University of Trento
  - 2004: M.S. Specialist Laurea degree in physics, University of Trento
  - 2003: B.S. Laurea degree in Physics, University of Trento
- **Awards:**
  - 2008: "Premio Nazionale Sergio Fubini" by Istituto Nazionale di Fisica Nucleare (INFN) for the best INFN Ph.D. thesis during the Apr. 2007 - Apr. 2008 period.
  - 2009: Awared from University of Trento for the best Ph.D. thesis of the academic year 2006/2007.
  - 2013: International Union of Pure and Applied Physics (IUPAP) Young Scientist Prize.
  - 2018: U.S. Department of Energy Early Career Research Award.
- **Employment:**
  - 10/2011–present: *Staff scientist* in the Nuclear Theory group at Los Alamos National Laboratory (LANL).
  - 08/2009–10/2011: *Postdoctoral research* at Los Alamos National Laboratory (LANL), advisor J. Carlson.
  - 12/2007–07/2009: *Research assignment* at S.I.S.S.A. (Italy), advisor S. Fantoni.
  - 2006: Assistant professor of "Nuclear and Subnuclear Physics" class, University of Trento.
- **Referee:** Physical Review Letters, Physical Review B, Physical Review C, Physics Letters B, Nuclear Physics A, The Astrophysical Journal, Astronomy & Astrophysics, European Physical Journal D, Journal of Low Temperature Physics, Journal of Computational Methods in Physics, Journal of the Physical Society of Japan (JPSJ), Computer Physics Communications, and others.
- **Grant proposal reviewer:** National Science Foundation (NSF), Czech Science Foundation, National Science Center (Poland), Department of Energy Office of Science, Natural Sciences and Engineering Research Council of Canada (NSERC), LANL LDRD Exploratory Research, LLNL Computing Grand Challenge proposal, LANL Institutional Computing project, LANL Institutional Computing Advisory Board.
- **Computing allocations:** *Quantum Monte Carlo calculations of properties of strongly interacting Fermi systems* (2011-present), PI, total of abuut 11M CPU Hours at DOE's NERSC; *Properties of nuclear matter and cold atoms* (2012-2013), PI, 4M CPU hours at Institutional Computing, LANL; *Towards the exact calculation of medium nuclei* (2015-present), PI, 3M CPU hours at Institutional Computing, LANL; *Electron and neutrino scattering from nuclei* (2016-present), PI, 38M CPU hours at Institutional Computing, LANL.
- **Publications:**
  - 65 papers published in refereed journals and 20 conference proceedings
  - Total number of citations is over 3,100 (h-index 32) in the SLAC-Spires database.

- **Publications Relevant to Proposed Work:**
  - S. Gandolfi, A. Yu Illarionov, S. Fantoni, F. Pederiva, K. E. Schmidt, "Equation of state of superfluid neutron matter and the calculation of $^1S_0$ pairing gap", Phys. Rev. Lett. 101, 132501 (2008).
  - Alexandros Gezerlis, S. Gandolfi, K. E. Schmidt, J. Carlson, "Heavy-Light Fermion Mixtures at Unitarity", Phys. Rev. Lett. 103, 060403 (2009).
  - S. Gandolfi, K. E. Schmidt, J. Carlson, "BEC-BCS crossover and universal relations in unitary Fermi gases", Phys. Rev. A 83, 041601(R) (2011).
  - Michael McNeil Forbes, Stefano Gandolfi, Alexandros Gezerlis, "Resonantly Interacting Fermions In a Box", Phys. Rev. Lett. 106, 235303 (2011).
  - J. Carlson, Stefano Gandolfi, Kevin E. Schmidt, Shiwei Zhang, "Auxiliary Field quantum Monte Carlo for Strongly Paired Fermions", Phys. Rev. A 84, 061602(R) (2011).
  - S. Gandolfi, J. Carlson, Sanjay Reddy, "The maximum mass and radius of neutron stars and the nuclear symmetry energy", Phys. Rev. C 85, 032801(R) (2012).
  - J. Carlson, Stefano Gandolfi and Alexandros Gezerlis, "Quantum Monte Carlo Approaches to Nuclear and Atomic Physics", Prog. Theor. Exp. Phys. 1, A209 (2012).
  - S. Gandolfi, A. Lovato, J. Carlson, Kevin E. Schmidt, "From the lightest nuclei to the equation of state of asymmetric nuclear matter with realistic nuclear interactions", Phys. Rev. C 90, 061306(R) (2014).
  - J. Carlson, S. Gandolfi, F. Pederiva, Steven C. Pieper, R. Schiavilla, K.E. Schmidt, R.B. Wiringa, "Quantum Monte Carlo methods for nuclear physics", Rev. Mod. Phys. 87, 1067 (2015).
  - Alexander Galea, Hillary Dawkins, Stefano Gandolfi, Alexandros Gezerlis, "Diffusion Monte Carlo study of strongly interacting 2D Fermi gases", Phys. Rev. A 93, 023602 (2016).
  - Lucas Madeira, Silvio A. Vitiello, Stefano Gandolfi, Kevin E. Schmidt, "A vortex line in the unitary Fermi gas", Phys. Rev. A 93, 043604 (2016).
- **Collaborators and Co-Editors in the last 48 months:**
  - O. Benhar (La Sapienza and INFN, Italy), E. Epelbaum (Ruhr-Universitat Bochum, Germany), F. J. Fattoyev (IU), A. Gezerlis (University of Guelph, Canada), G. Hagen (ORNL and UT), K. Hebeler (TU Darmstadt, Germany), M. Hjorth-Jensen (University of Oslo and MSU), C. J. Horowitz (IU), D. Lonardoni (University of Trento, Italy), A. Lovato (ANL), J. E. Lynn (LANL), W. G. Newton (TAMU), T. Papenbrock (ORNL and UT), F. Pederiva (University of Trento, Italy), S. C. Pieper (ANL), S. Reddy (INT), R. Schiavilla (JL, ODU), K. E. Schmidt (ASU), A. Schwenk (TU Darmstadt, Germany), A. W. Steiner (INT), I. Tews (INT), R. B. Wiringa (ANL).
- **Graduate and Postdoctoral Advisors and Advisees:**
  - F. Pederiva (University of Trento), graduate advisor
  - S. Fantoni (ANVUR), postdoctoral advisor
  - J. Carlson (LANL), S. Reddy (INT), postdoctoral advisors
  - Lianyi He (Tsinghua University), J. Lynn (University of Darmstadt), D. Lonardoni (LANL), S. Pastore (WUSTL), A. Roggero (INT), I. Tews (LANL) postdoctoral advisees