

RICHARD JOHN FURNSTAHL

Department of Physics
The Ohio State University
Columbus, OH 43210
(614) 292-4830
furnstahl.1@osu.edu

CURRICULUM VITAE

Born: January 13, 1959

Haddonfield, New Jersey

Education:

<i>Degree</i>	<i>Institution</i>	<i>Date</i>
Ph.D.	Stanford University	1986
B.S.	M. I. T.	1981

Academic Positions:

Full Professor	The Ohio State University	2000– <i>present</i>
Associate Professor	The Ohio State University	1995–2000
Assistant Professor	The Ohio State University	1991–1995
Assistant Research Scientist	University of Maryland	1990–1991
CTP Fellow	University of Maryland	1987–1990
Postdoctoral Fellow	Indiana University	1985–1987

Fellowships and Awards:

APS Outstanding Referee	2009
Fellow of the AAAS	2007
Harlan Hatcher Memorial Award for Excellence (OSU)	2005
John and Ruth Mount Award (OSU)	2004
Fellow of the American Physical Society	2001
Ohio State Alumni Award for Distinguished Teaching	1997
NSF National Young Investigator	1992–1998
Alfred P. Sloan Research Fellowship	1992–1996
CTP Fellow, University of Maryland	1987–1990
Chester Davis Fellow, Indiana University	1985–1986

National and International Committees:

Editorial Board of Journal of Physics G (Associate Editor)	2017– <i>present</i>
EMMI Scientific Advisory Committee (Chair since 2017)	2016– <i>present</i>
APS Committee on Scientific Publications	2016–2019

APS DNP Feshbach Prize Selection Committee	2015–2016
FRIB Theory Users Group Executive Committee	2012–2015
FRIB Theory Alliance Steering Committee	2013–2020
TALENT Steering Committee (Director 2015–2019)	2012–2019
SciDAC NUCLEI Council	2012– <i>present</i>
APS Division of Nuclear Physics Executive Committee	2011–2013
Nuclear Science Advisory Committee (NSAC)	2009–2011
Institute for Nuclear Theory National Advisory Committee (chair 2010–12)	2009–2012
SciDAC UNEDF Council	2007–2012
APS Division of Nuclear Physics Nominating Committee	2005–2006
APS Division of Nuclear Physics Webpage Committee (chair 2012-13)	2002–2013
National Nuclear Physics Summer School Committee (chair 2002-03)	2001–2005
National Science Foundation Committee of Visitors	2003
Institute for Nuclear Theory National Advisory Committee	1999–2001
APS Division of Nuclear Physics Education Committee	1997–2001
APS Research at an Undergraduate Inst. Award Committee (chair)	1996–1998
IUCF Program Advisory Committee	1992–1995
APS Maria Goeppert-Mayer Award Committee (chair 1994-95)	1993–1995

Ohio State University Committees:

Battelle Endowment for Technology and Human Affairs (BETHA)	2006–2009
Faculty Steering Committee for the Undergraduate Research Office	2005–2010
Instruction Technology Advisory Committee	2002–2003
MAPS Curriculum committee	2001–2002
BETHA Committee (chair 2000-2001)	1999–2001
Task Force on Electronic Theses and Dissertations	1998
Graduate Associate Teaching Award Selection Committee	1998
Searle Scholars Selection Committee	1997
Special College Committee on Computer Support Salaries	1997
College Computer Committee	1995–1996

Professional Societies:

American Physical Society, American Association of Physics Teachers,
American Association for the Advancement of Science

Referee:

Physical Review Letters, Physical Review B, C, and D, Nuclear Physics A, Physics Letters B,
European Journal of Physics, Physics Reports, Reviews of Modern Physics
Editorial Board of Physical Review C (2006–2008)
National Science Foundation (panel chair 2012), U.S. Department of Energy, NSERC
INCITE Panel for Nuclear Physics (2010–2011, chair 2014, 2015)

DOE Nuclear Theory Comparative Review (2013)

Funding:

Ohio State University Seed Grant	1991–92	\$17,250.
National Science Foundation Grant (PHY–9203145)	1992–95	\$118,000.
IBM Grant (with Prof. B. C. Clark)	1992–94	\$61,236.
National Young Investigator Award (PHY–9258270)	1992–97	\$270,000.
Sloan Foundation Fellowship	1992–96	\$30,000.
NSF Grant (PHY–9511923) [with Profs. Clark and Perry]	1995–98	\$475,000.
NSF Grant (DUE–9653145) [with Prof. van Heuvelen]	1997–00	\$400,000.
NSF Grant (PHY–9800964) [with Profs. Clark and Perry]	1998–01	\$750,000.
NSF Grant (PHY–0098645) [with Profs. Clark and Perry]	2001–04	\$840,000.
NSF Grant (PHY–0354916) [with Profs. Clark, Jeschonnek, and Perry]	2004–07	\$575,000.
DOE SciDAC Grant (371984 and DE–FC02–09ER41586)	2006–11	\$474,000.
NSF Grant (PHY–0653312) [with Jeschonnek and Perry]	2007–10	\$692,000.
NSF Grant (PHY–1002478) [with Jeschonnek and Perry]	2010–13	\$991,000.
DOE SciDAC NUCLEI Grant (DE–SC0008533)	2012–17	\$425,000.
NSF Grant (PHY–1306250) [with Jeschonnek and Perry]	2013–17	\$688,000.
NSF Grant (PHY–1614460) [with Jeschonnek and Perry]	2016–19	\$630,000.
DOE SciDAC NUCLEI Grant (RC107839–OSU)	2017–22	\$372,000.
NSF Grant (PHY–1913069)	2019–22	\$480,000.
NSF CSSI Grant (OAC–2004601)	2020–25	\$846,389.

Postdocs mentored

Xilin Zhang (2018–*present*), Nathan Parzuchowski (2017–18), Xiniu Zhang (2016–18), Sebastian Koenig (2013–16), Heiko Hergert (2011–14), Kai Hebeler (2010–13), Joaquin Drut (2008–10), Lucas Platter (2007–09), Sunethra Ramanan (2007), Scott Bogner (2005–07), Achim Schwenk (2002–04), Steven Puglia (2001–03), Hans-Werner Hammer (2000–02), Thomas Mehen (1999–2001), Michael Strickland (1997–99), James Steele (1997–99), Werner Koepf (1996–98), Hua-Bin Tang (1994–96), Derek Leinweber (1993–94)

Former graduate students:

Eric Anderson (PhD 2012), Anirban Bhattacharyya (PhD 2005), Ryan Caulfield (MS 2018), Alex Dyhdalo (PhD 2018), Eric Jurgenson (PhD 2009), Jordan Melendez (PhD 2020), Sushant More (PhD 2016), Alex Perhac (MS 2016), Sunethra Ramanan (PhD 2007), John Rusnak (PhD 1997), Negussie Tirfessa (PhD 2001), Kyle Wendt (PhD 2013), Sarah Wesolowski (PhD 2017), Trey White (MS 1996)

Current graduate students:

Alberto Garcia, Mostofa Hisham, Patrick Millican, Anthony Tropiano

Lectures at physics schools

INT/TALENT course on Bayesian Methods in Nuclear Physics, York, UK	2019
HUGS Summer School, Jefferson Lab, Newport News, VA	2014
INT/TALENT course on Nuclear Forces, Seattle WA	2013
National Nuclear Physics Summer School	2004, 2012
49 th Schladming International Winter School, Austria	2011
TRIUMF Summer Institute, Vancouver, BC	1994, 2008
ECT* School on RG and EFT Approaches, Trento, Italy	2006
17th Indian-Summer School, Rez/Prague, Czech Republic	2005
Beijing Summer School on Nuclear QCD, Beijing, China	1995

Programs (≥ 4 weeks) co-organized

INT Program on “Nuclear Structure at the Crossroads”, Summer, 2019
INT Program on “Bayesian Methods in Nuclear Physics”, Summer, 2016
EMMI Program on “The Extreme Matter Physics of Nuclei: From Universal Properties to Neutron-Rich Extremes”, Spring, 2012
INT Program on “Effective Field Theories and the Many-Body Problem”, Spring, 2009
INT Program on “Theories of Nuclear Forces and Nuclear Systems”, Autumn, 2003

Research topics:

Prof. Furnstahl’s current research applies effective field theory (EFT) and renormalization group methods to strong-interaction few- and many-body systems. This includes deriving low-momentum few-body interactions based on chiral EFT and using them to construct a microscopic energy density functional for nuclei. He develops and applies Bayesian statistical methods for uncertainty quantification.