

# Biographical Information

**Morten Hjorth-Jensen**<sup>1,2</sup>

<sup>1</sup>Department of Physics, University of Oslo, Norway

<sup>2</sup>Department of Physics and Astronomy and National Superconducting Cyclotron Laboratory, Michigan State University, USA

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## Professional preparation, education and personal data:

- Professor of Physics at Michigan State University, USA and the University of Oslo, Norway
- Norwegian citizen, born in Haugesund, July 29, 1961
- Norwegian University of Science and Technology, Trondheim, Norway, Siv.Ing. in Theoretical Physics (Master of Science equivalent), 1988
- University of Oslo, Norway, Ph.D in Theoretical Nuclear Physics, 1993
- ECT\*, Trento, Italy, Postdoctoral Researcher in Theoretical Nuclear Physics, 1994-1996
- Nordita, Copenhagen, Denmark, Postdoctoral Researcher in Theoretical Nuclear Physics, 1996-1998

## Appointments:

Position	Institution	Dates
Associate Professor of Physics	University of Oslo	1999-2001
Professor of Physics	University of Oslo	2001-present
Adjunct Professor of Physics	Michigan State University	2003-2011
Professor of Physics	Michigan State University	2012-present

## Awards:

1. University of Oslo award for excellence in teaching, 2000
2. Fellow of the American Physical Society, 2007
3. Oak Ridge National Laboratory excellence in research award, 2008
4. Outstanding referee award of the American Physical Society, 2008
5. University of Oslo award for excellence in teaching for the **Computing in Science Education** project, 2011
6. NOKUT (Norwegian entity of quality assessment in higher education) award for excellence in teaching for the **Computing in Science Education** project, 2012
7. Elected member of the Norwegian Academy of Sciences and Letters, 2013
8. Elected member of the Royal Norwegian Society of Sciences and Letters, 2015
9. University of Oslo award for excellence in teaching for developing the Computational Physics group, 2015
10. Favorite graduate teacher at Michigan State University, 2016

## Citation metrics and highly cited articles:

1. [Google scholar h-index=47, 8014 citations \(April 2016\)](#)
2. ISI web of science h-index=41 Search [hjorth-jensen](#) or [hjorthjensen](#)
3. **Realistic effective interactions for nuclear systems**, M Hjorth-Jensen, TTS Kuo, E Osnes, [Physics Reports 261, 125-270 \(1995\)](#), cited 668 times (Google Scholar)
4. **Phases of dense matter in neutron stars**, H Heiselberg, M Hjorth-Jensen, [Physics Reports 328, 237-327 \(2000\)](#), cited 379 times (Google Scholar)
5. **Pairing in nuclear systems: from neutron stars to finite nuclei**, DJ Dean, M Hjorth-Jensen, [Reviews of Modern Physics 75, 607 \(2003\)](#), cited 321 times (Google Scholar)

## Synergistic Activities:

- Since 1999 I have established an activity in computational physics at the Department of Physics at the University of Oslo. I have also started from scratch and developed several courses on computational physics and many-body physics. This activity was recognized with the Excellence in Teaching award from the University of Oslo in 2015. During the last fifteen years I have guided 50 Master of Science of students (28 have continued with PhD studies) and ten PhD students. I currently supervise twelve Master of Science students at the University of Oslo. I supervise four PhD students at Michigan State University.
- With colleagues at the University of Oslo, I have been strongly involved in the development of a totally new teaching philosophy which merges computation with the traditional science and mathematics curriculum. This project is called [Computing in Science Education](#) and has received considerable support from the University of Oslo and the Norwegian Ministry of research and education. It received the University of Oslo award for excellence in teaching in 2011 and the NOKUT award in 2012.
- With colleagues from the USA and other European countries, we have started the Nuclear Talent initiative": "<http://www.nucleartalent.org>", where we aim at providing an advanced and comprehensive training to graduate students and young researchers in low-energy nuclear theory. The network aims at developing a broad curriculum that will provide the platform for a cutting-edge theory for understanding nuclei and nuclear reactions. Within 2016 the initiative has run and developing eleven courses. I chaired the steering committee from its beginning in 2010 till 2015.
- Together with colleagues in the USA, I am, due to my shared position at Michigan State University, deeply involved in the set up of a large center in theoretical nuclear physics that will be linked up with the coming Facility for Radioactive Ion Beams at Michigan State university.

## Service through the years

### Editorial boards and committees.

- Member of the Physics Advisory Committee at the National Superconducting Cyclotron Laboratory, Michigan State University, East Lansing, USA, 2003-2008
- Member of the Canadian research council's evaluation board on subatomic physics 2012-2015.
- Member of the Swedish research council's evaluation board on subatomic physics 2007-2008.

- Editorial Board member of Physical Review C
- Editorial Board member of European Physical Journal A
- Editorial Board member of European Physical Journal Special Topics.
- Editorial Board member of Springer's Lecture Notes in Physics
- Editorial Board member of Springer's Undergraduate Lecture Notes in Physics
- Editorial board member of Computers in Science and Discovery journal, a journal by IOP, UK.
- [Steering Committee member of the FRIB theory alliance at Michigan State University \(2013-2016\)](#)
- [Initiated and led the Nuclear Talent initiative from 2010 till 2015, now member of the Steering committee](#)
- Member of the Board of Usit at UiO (Center for information technology at the University of Oslo), 2002-2004
- Project leader for High-performance computing courses at UiO, 2000-2003
- Board member of the Bachelor program Mathematics, Information theory and Technology at the University of Oslo, 2002-2008
- Leader of the Bachelor program Physics, Astronomy and Meteorology at the University of Oslo, 2002-2011
- Together with colleagues from the Department of Physics, Department of Mathematics and Department of Informatics at the University of Oslo, we started the Computers in Science Education project in 2004. This project, which we conceived back in 2003, has changed totally changed the way Science is taught.
- Member of the OECD working group in nuclear physics 2006-2008
- January 2009-December 2011, leader of the Nuclear Physics group at the University of Oslo

#### **Referee for International Journals.**

- Referee for Reviews of Modern Physics
- Referee for Physical Review Letters
- Referee for Nature
- Referee for Physical Review C

- Referee for Physical Review **D**
- Referee for Nuclear Physics **A**
- Referee for Physics Letters **B**
- Referee for Astrophysical Journal
- Referee for Journal of Chemical Physics
- Referee for Journal of Physics **A**: Mathematical Physics
- Referee for Journal of Physics **G**: Nuclear and Particle Physics
- Referee for European Journal of Physics **A**
- Referee for European Physics Letters
- Referee for Few Body Systems
- Referee for Modern Journal of Physics **E**
- Referee for Physica Scripta
- Referee for Annals of Physics
- Referee for SIAM
- Referee for Computer Physics Communications
- Referee for Computers in Science and Discovery
- Referee for Journal of Mathematics Physics

**Other Referee Activities.**

- Referee for the Canadian Research Council
- Referee for the Israelian Research Council
- Referee for the South African Research Council
- Referee for the British Research Council
- Referee for the German Research Council
- Referee for the American Department of Energy (DOE)
- Referee for the American National Science Foundation (NSF)
- Referee for INFN, Istituto Nazionale di Fisica Nucleare, Italy
- Referee for ESF, European Science Foundation

- Referee for Vetenskapsrådet, the Swedish Research Council
- Referee for the Danish Research Council
- Referee for the Serbian Research Ministry
- Referee for the Russian Research Council
- Opponent at several PhD dissertations.
- Member of more than 20 PhD guidance committees at Michigan State University
- Several expert evaluations on promotion applications.
- Member or leader of several job assessment committees in Norway and the USA

## **Master of Science, PhD and Post-doctoral fellows**

In total, since I was hired at the University of Oslo in 1999, I have guided and co-guided a total of 60 Master of Science and PhD students. I presently guide four graduate students at Michigan State University and twelve Master of Science students at the University of Oslo.

### **Present PhD students.**

1. John Bower, Michigan State University, started in 2014
2. Justin Lietz, Michigan State University, started in 2013
3. Sam Novario, Michigan State University, started in 2014
4. Fei Yuan, Michigan State University, started in 2013

### **Former PhD students and their present positions.**

1. [Gustav Baardsen](#) (PhD UiO 2014), now post-doctoral researcher at the Center for Theoretical and Computational Chemistry (CTCC), University of Oslo
2. [Simen Kvaal](#) (PhD UiO 2009), now associate professor of chemistry, Department of Chemistry, University of Oslo. Recipient of an ERC starting grant
3. [Gustav Jansen](#) (PhD UiO 2012), now permanent position as scientist at the Computational Science Division of Oak Ridge National Laboratory
4. [Torquil MacDonald Sorensen](#) (PhD UiO 2012), post-doctoral fellow at the Department of Mathematics, UiO

5. [Jon Kerr Nilsen](#) (PhD UiO 2010), senior engineer at the University of Oslo center for information technologies
6. [Marius Lysebo](#) (PhD UiO 2010), now Associate Professor at Oslo University College
7. [Elise Bergli](#) (PhD UiO 2010), teacher Ås high school, Norway
8. [Eirik Ovrum](#) (PhD UiO 2007), now Associate Professor at the University College of Southeast of Norway
9. [Gaute Hagen](#) (PhD UiB and UiO 2005), now permanent position as scientist at the Physics Division of Oak Ridge National Laboratory. Recipient of the Department of Energy Early career award
10. Maxim Kartamyshev (PhD UiO), now at the Bank of Norway as senior analyst

#### **Post-doctoral fellows and their present positions.**

1. Andreas Ekstrom (UiO and MSU 2010-2014)
2. Oyvind Jensen (UiO 2011), now researcher at the [Institute for Energy Technology](#)
3. Simen Kvaal (UiO 2008-2012), now associate professor of chemistry, Department of Chemistry, University of Oslo. Recipient of an ERC starting grant
4. Elise Bergli (UiO 2010-2011), now Associate Professor at the Norwegian University for Life Sciences
5. Solve Selsto (UiO 2008-2010), now Associate Professor at Oslo University College
6. Nicolas Michel (MSU 2013), now senior researcher at Michigan State University

#### **Master of Science Students.**

### **Publications, books and refereed scientific articles**

#### **Books:**

1. Morten Hjorth-Jensen, *Computational Physics, an introduction*, to be published by IOP in 2016.
2. Morten Hjorth-Jensen, *Computational Physics, an advanced course*, to be published by IOP in 2016.

3. Morten Hjorth-Jensen, *Nuclear many-body physics, a computational perspective*, in preparation for Taylor Francis.
4. M. Hjorth-Jensen, Maria Paola Lambardo, and Ubirajara Van Kolck (editors), *Computational Nuclear Physics—Bridging the scales, from quarks to neutron stars*, to be published in Lectures Notes in Physics by Springer in 2016.

**Publications in journals with a referee system:**

1. Fei Yuan, Sarah Reimann, Scott K. Bogner and Morten Hjorth-Jensen, *First principle calculations of quantum dot systems*, in preparation
2. G. Hagen, A. Ekstrom, C. Forssen , G. R. Jansen, W. Nazarewicz, T. Papenbrock, K. A. Wendt, S. Bacca, N. Barnea, B. Carlsson, C. Drischler, K. Hebeler, M. Hjorth-Jensen, M. Miorelli, G. Orlandini, A. Schwenk, and J. Simonis, *Charge, neutron, and weak size of the atomic nucleus*, *Nature Physics*, doi:10.1038/nphys3529 (2015).
3. A. Ekstrom, G. R. Jansen, K. A. Wendt, G. Hagen, T. Papenbrock, B. D. Carlsson, C. Forssen, M. Hjorth-Jensen, P. Navratil, W. Nazarewicz, *Accurate nuclear radii and binding energies from a chiral interaction*, *Physical Review C*, 91, 051301(R) (2015).
4. A. Ekstrom, B. D. Carlsson, K. A. Wendt, C. Forssén, M. Hjorth-Jensen, R. Machleidt, S. M. Wild, *Statistical uncertainties of a chiral interaction at next-to-next-to leading order*, *Journal of Physics G*, 42:034003 (2015).
5. A. B. Balantekin, J. Carlson, D. J. Dean, G. M. Fuller, R. J. Furnstahl, M. Hjorth-Jensen, R. V. F. Janssens, Bao-An Li, W. Nazarewicz, F. M. Nunes, W. E. Ormand, S. Reddy, B. M. Sherrill , *Nuclear Theory and Science of the Facility for Rare Isotope Beams*, *Modern Physics Letters A*, 29:1430010 (2014).
6. Zs. Vajta, M. Stanoiu, D. Sohler, G. R. Jansen, F. Azaiez, Zs. Dombrádi, O. Sorlin, B. A. Brown, M. Belleguic, C. Borcea, C. Bourgeois, Z. Dlouhy, Z. Elekes, Zs. Fülöp, S. Grévy, D. Guillemaud-Mueller, G. Hagen, M. Hjorth-Jensen, F. Ibrahim, A. Kerek, A. Krasznahorkay, M. Lewitowicz, S. M. Lukyanov, S. Mandal, P. Mayet, J. Mrázek, F. Negoita, Yu.-E. Penionzhkevich, Zs. Podolyák, P. Roussel-Chomaz, M. G. Saint-Laurent, H. Savajols, G. Sletten, J. Timár, C. Timis, and A. Yamamoto, *\*Excited states in the neutron-rich nucleus  $^{25}\text{F}$* , *Physical Review C*, 89:054323 (2014).
7. A. Sanetullaev, M.B. Tsang, W.G. Lynch, Jenny Lee, D. Bazin, K.P. Chan, D. Coupland, V. Henzl, D. Henzlova, M. Kilburn, A.M. Rogers, Z.Y. Sun, M. Youngs, R.J. Charity, L.G. Sobotka, M. Famiano, S. Hudan, D. Shapira, W.A. Peters, C. Barbieri, M. Hjorth-Jensen, M. Horoi, T. Otsuka, T. Suzuki, Y. Utsuno *Neutron spectroscopic factors of  $^{55}\text{Ni}$  hole-states from  $(p,d)$  transfer reactions*, *Physics Letters B*, 736:137 (2014).



8. G. Hagen, T. Papenbrock, A. Ekstrom, G. Baardsen, S. Gandolfi, K. A. Wendt, M. Hjorth-Jensen, and C. Horowitz, *Coupled-cluster calculations of nucleonic matter*, *Physical Review C*, 89:014319 (2014).
9. T. Papenbrock, G. Hagen, M. Hjorth-Jensen, and D. J. Dean, *Coupled-cluster computations of atomic nuclei*, *Reports on Progress in Physics*, 77:096302 (2014).
10. N. Tsunoda, K. Takayanagi, M. Hjorth-Jensen and T. Otsuka, *Multi-shell effective interactions*, *Physical Review C*, 89:024313 (2014).
11. G. Baardsen, A. Ekstrom, G. Hagen, and M. Hjorth-Jensen, *Coupled-cluster studies of infinite nuclear matter*, *Physical Review C*, 88:054312 (2013).
12. V. M. Bader, A. Gade, D. Weisshaar, T. Baugher, D. Bazin, J. S. Berryman, B. A. Brown, A. Ekstrom, M. Hjorth-Jensen, S. R. Stroberg, W. B. Walters, K. Wimmer, and R. Winkler, *Quadrupole collectivity in neutron-deficient Sn nuclei:  $^{104}\text{Sn}$  and the role of proton excitations*, *Physical Review C*, 88:051301(R) (2013).
13. A. Ekstrom, G. Baardsen, C. Forss'en, G. Hagen, M. Hjorth-Jensen, G. R. Jansen, R. Machleidt, W. Nazarewicz, T. Papenbrock, J. Sarich, and S. M. Wild, *An optimal chiral interaction at next-to-next-to leading order*, *Physical Review Letters*, 110:192502 (2013).
14. Lepailleur, A. and Sorlin, O. and Caceres, L. and Bastin, B. and Borcea, C. and Borcea, R. and Brown, B. A. and Gaudefroy, L. and Gr'evy, S. and Grinyer, G. F. and Hagen, G. and Hjorth-Jensen, M. and Jansen, G. R. and Llidoo, O. and Negoita, F. and de Oliveira, F. and Porquet, M.-G. and Rotaru, F. and Saint-Laurent, M.-G. and Sohler, D. and Stanoiu, M. and Thomas, J. C., *Spectroscopy of  $^{26}\text{F}$  to Probe Proton-Neutron Forces Close to the Drip Line*, *Physical Review Letters*, 110:082502 (2013).
15. D. D. DiJulio, J. Cederkall, C. Fahlander, A. Ekstrom, M. Hjorth-Jensen, M. Albers, V. Bildstein, A. Blazhev, I. Darby, T. Davinson, H. De Witte, J. Diriken, Ch. Fransen, K. Geibel, R. Gernhäuser, A. Görgen, H. Hess, K. Heyde, J. Iwanicki, R. Lutter, P. Reiter, M. Scheck, M. Seidlitz, S. Siem, J. Taprogge, G. M. Tveten, J. Van de Walle, D. Voulot, N. Warr, F. Wenander, and K. Wimmer *Coulomb excitation of  $^{107}\text{In}$* , *Physical Review C*, 87:017301 (2013).
16. C. Forssen, G. Hagen, M. Hjorth-Jensen, W. Nazarewicz, and J. Rotureau, *Living on the edge of stability, the limits of the nuclear landscape*, *Physica Scripta*, T152:014022 (2013).
17. Liddick, S. N. and Abromeit, B. and Ayres, A. and Bey, A. and Bingham, C. R. and Brown, B. A. and Cartegni, L. and Crawford, H. L. and Darby, I. G. and Grzywacz, R. and Ilyushkin, S. and Hjorth-Jensen, M. and Larson,

- N. and Madurga, M. and Miller, D. and Padgett, S. and Paulauskas, S. V. and Rajabali, M. M. and Rykaczewski, K. and Suchyta, S., \* Low-energy level schemes of  $^{66,68}\text{Fe}$  and inferred proton and neutron excitations across  $Z = 28$  and  $N = 40^*$ , *Physical Review C*, 87:014325, 2013.
18. D. D. DiJulio, J. Cederkall, C. Fahlander, A. Ekstrom, M. Hjorth-Jensen, M. Albers, V. Bildstein, A. Blazhev, I. Darby, T. Davinson, H. De Witte, J. Diriken, Ch. Fransen, K. Geibel, R. Gernhauser, A. Gorgen, H. Hess, J. Iwanicki, R. Lutter, P. Reiter, M. Scheck, M. Seidlitz, S. Siem, J. Taprogge, G.M. Tveten, J. Van de Walle, D. Voulot, N. Warr, F. Wenander, and K. Wimmer, *Excitation strengths in  $^{109}\text{Sn}$ : Single-neutron and collective excitations near  $^{100}\text{Sn}$* , *Physical Review C*, 86:031302(R), 2012.
  19. D. D. DiJulio, J. Cederkall, C. Fahlander, A. Ekstrom, M. Hjorth-Jensen, M. Albers, V. Bildstein, A. Blazhev, I. Darby, T. Davinson, H. De Witte, J. Diriken, Ch. Fransen, K. Geibel, R. Gernhauser, A. Gorgen, H. Hess, J. Iwanicki, R. Lutter, P. Reiter, M. Scheck, M. Seidlitz, S. Siem, J. Taprogge, G.M. Tveten, J. Van de Walle, D. Voulot, N. Warr, F. Wenander, and K. Wimmer, *Coulomb excitation of  $^{107}\text{Sn}$* , *European Journal of Physics A*, 48:105, 2012.
  20. Gaute Hagen, Morten Hjorth-Jensen, Gustav Ragnar Jansen, Ruprecht Machleidt, and Thomas Papenbrock, *Evolution of shell structure in neutron-rich calcium isotopes*, *Physical Review Letters*, 109:032502, 2012.
  21. Gaute Hagen, Morten Hjorth-Jensen, Gustav Ragnar Jansen, Ruprecht Machleidt, and Thomas Papenbrock, *Continuum effects and three-nucleon forces in neutron-rich oxygen isotopes*, *Physical Review Letters*, 108:242501, 2012.
  22. Torres, D. A. and Kumbartzki, G. J. and Sharon, Y. Y. and Zamick, L. and Manning, B. and Benczer-Koller, N. and Speidel, K.-H. and Ahn, T. and Anagnostatou, V. and Elvers, M. and Goddard, P. and Heinz, A. and Ilie, G. and Radeck, D. and Savran, D. and Werner, V. and Gurdal, G. and Taylor, M. J. and Maier-Komor, P. and Hjorth-Jensen, M. and Robinson, S. J. Q. *Measurement of the  $^{96}\text{Ru}$   $g$ -factor and its nuclear structure interpretation*. *Physical Review C*, 85:017305, 2012.
  23. Torres, D. A. and Kumbartzki, G. J. and Sharon, Y. Y. and Zamick, L. and Manning, B. and Benczer-Koller, N. and Gurdal, G. and Speidel, K.-H. and Hjorth-Jensen, M. and Maier-Komor, P. and Robinson, S. J. Q. and Ahn, T. and Anagnostatou, V. and Elvers, M. and Goddard, P. and Heinz, A. and Ilie, G. and Radeck, D. and Savran, D. and Werner, V. *First  $g$ -factor measurements of the  $2^+$  and the  $4^+$  states of radioactive  $^{100}\text{Pd}$* . *Physical Review C*, 84:044327, 2011.
  24. Naofumi Tsunoda, Takaharu Otsuka, Koshiroh Tsukiyama, and Morten Hjorth-Jensen *Renormalization persistency of the tensor force in nuclei*. *Physical Review C*, 84:044322, 2011.

25. O. Jensen, Gaute Hagen, Morten Hjorth-Jensen, Alex Boyd Brown, and Alexandra Gade *Quenching of spectroscopic factors for proton removal in oxygen isotopes*, *Physical Review Letters*, 107:032501, 2011.
26. Magnus Pedersen Lohne, Gaute Hagen, Morten Hjorth-Jensen, Simen Kvaal, and Francesco Pederiva, *Ab initio calculations of Circular quantum dots*. *Physical Review B*, 84:032501, 2011.
27. Elise Bergli and Morten Hjorth-Jensen, \*Summation of Parquet diagrams as an *ab initio* method in nuclear structure calculations\*, *Annals of Physics*, 326:1125, 2011.
28. Gustav Ragnar Jansen, Morten Hjorth-Jensen, Gaute Hagen, and Thomas Papenbrock, *Toward open-shell nuclei with coupled-cluster theory*. *Physical Review C*, 83:054306, 2011.
29. Morten Hjorth-Jensen, *The Carbon Challenge*, *Physics*, 4:38, 2011.
30. O. Jensen, G. Hagen, M. Hjorth-Jensen, and J. S. Vaagen, *Closed-shell properties of  $^{24}\text{O}$  with *ab initio* coupled-cluster theory*, *Physical Review C*, 83:021305, 2011.
31. Angelo Signoracci, B. Alex Brown, and Morten Hjorth-Jensen, *Renormalized interactions with a realistic single-particle basis*, *Physical Review C*, 83:024315, 2011.
32. Boyd Alexander Brown, Angelo Signoracci, and Morten Hjorth-Jensen, *Configuration interactions constrained by energy density functionals*, *Physics Letters B*, 695:507, 2011.
33. G. Hagen, T. Papenbrock, D. J. Dean, and M. Hjorth-Jensen, \*Ab initio coupled-cluster approach to nuclear structure with modern nucleon-nucleon interactions, *Phys. Rev. C*, 82(3):034330, 2010.
34. L. Atanasova, Dimiter Balabanski, S. K. Chamoli, M. Hass, G. S. Simpson, D. Bazzacco, F. Becker, P. Bednarczyk, G. Benzoni, N. Blasi, A. Blazhev, A. Bracco, C. Brandau, L. Caceres, F. Camera, F. C. L. Crespi, P. Detistov, P. Doornenbal, C. Fahlander, E. Farnea, G. Georgiev, J. Gerl, K. A. Gladnishki, M. Gorska, J. Grebosz, R. Hoischen, G. Ilie, M. Ionescu-Bujor, A. Iordachescu, A. Jungclaus, G. Bianco, M. Kmiecik, I. Kojouharov, N. Kurz, S. Lakshmi, R. Lozeva, A. Maj, D. Montanari, G. Neyens, M. Pfuetzner, S. Pietri, Z. Podolyak, W. Prokopowicz, D. Rudolph, G. Rusev, T. Saito, A. Saltarelli, H. Schaffner, R. Schwengner, S. Tashenov, J. J. Valiente-Dobon, N. Vermeulen, J. Walker, E. Werner-Malento, O. Wieland, H. J. Wollersheim, H. Grawe, and Morten Hjorth-Jensen. *g-factor measurements at RISING: The cases of  $^{127}\text{Sn}$  and  $^{128}\text{Sn}$* . *Europhysics letters*, 91:42001, 2010.

35. I. Darby, R. Grzywacz, J. C. Batchelder, C. R. Bingham, L. Cartegni, C. J. Gross, Morten Hjorth-Jensen, D. T. Joss, S. N. Liddick, W. Nazarewicz, S. Padgett, R. D. Page, Thomas Papenbrock, M. M. Rajabali, J. Rotureau, and K. P. Rykaczewski, *Orbital Dependent Nucleonic Pairing in the Lightest Known Isotopes of Tin*. *Physical Review Letters*, 105:162502, 2010.
36. A. Ekstrom, Joakim Cederkall, Claes Fahlander, Morten Hjorth-Jensen, Torgeir Engeland, Peter Butler, P. A. Butler, T. Davinson, J. Eberth, F. Finke, Andreas Gorgen, M. Gorska, A. M. Hurst, O. Ivanov, J. Iwanicki, U. Koster, B. A. Marsh, J. Mierzejewski, P. Reiter, Sunniva Siem, G. Sletten, I. Stefanescu, Gry Merete Tveten, J. Van de Walle, D. Voulot, N. Warr, D. Weisshaar, F. Wenander, and M. Zielinska, *Coulomb excitation of the odd-odd isotopes  $^{106}\text{In}$  and  $^{108}\text{In}$* , *European Physical Journal A*, 44:355, 2010.
37. Gaute Hagen, Thomas Papenbrock, and Morten Hjorth-Jensen, *Ab Initio Computation of the  $^{17}\text{F}$  Proton Halo State and Resonances in  $A=17$  Nuclei*, *Physical Review Letters*, 104:182501, 2010.
38. Morten Hjorth-Jensen, David Jarvis Dean, G. Hagen, and Simen Kvaal, *Many-body interactions and nuclear structure*, *Journal of Physics G: Nuclear and Particle Physics*, 37:064035, 2010.
39. N. Hoteling, C. Chiara, R. Broda, W. B. Walters, R. V. F. Janssens, Morten Hjorth-Jensen, M. B. Carpenter, B. Fornal, A. A. Hecht, W. Krolas, T. Lauritsen, T. Pawlat, D. Seweryniak, X. Wang, A. Wöhr, J. Wrzesinski, and S. Zhu. *Structure of  $^{60,62}\text{Fe}$  and the onset of  $n_{g(9/2)}$  occupancy*, *Physical Review C*, 82:044305, 2010.
40. Takahuro Otsuka, Toshio Suzuki, Micho Honma, Yutaka Utsuno, Naofumi Tsunoda, Koshiro Tsukiyama, and Morten Hjorth-Jensen, *Novel Features of Nuclear Forces and Shell Evolution in Exotic Nuclei*, *Physical Review Letters*, 104:012501, 2010.
41. C. Barbieri and Morten Hjorth-Jensen, *Quasiparticle and quasihole states of nuclei around  $^{56}\text{Ni}$* , *Physical Review C*, 79:064313, 2009.
42. A. Ekstrom, J. Cederkall, D. D. DiJulio, C. Fahlander, Morten Hjorth-Jensen, A. Blazhev, B. Bruyneel, P. A. Butler, T. Davinson, J. Eberth, C. Fransen, K. Geibel, H. Hess, O. Ivanov, J. Iwanicki, O. Kester, J. Kownacki, U. Koster, B. A. Marsh, P. reiter, M. Scheck, B. Siebeck, Sunniva Siem, I. Stefanescu, Heidi Kristine Toft, Gry Merete Tveten, J. Van de Walle, D. Voulot, N. Warr, D. Weisshaar, F. Wenander, K. Wrzosek, and M. Zielinska, *Electric quadrupole moments of the  $2^+$  states in  $^{100,102,104}\text{Cd}$* , *Physical Review C*, 80:054302, 2009.
43. G. Hagen, T. Papenbrock, D. J. Dean, Morten Hjorth-Jensen, and B. V. Asokan, *Ab initio computation of neutron-rich oxygen isotopes*, *Physical Review C*, 80:021306, 2009.

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