## 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

2016

## 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

## Brief research overview

I am a theoretical physicist with a strong interest in computational physics and many-body theory in general, and the nuclear many-body problem and nuclear structure problems in particular. This means that I study various methods for solving either Schrödinger's equation or Dirac's equation for many interacting particles, spanning from algorithmic aspects to the mathematical properties of such methods. The latter also leads to a strong interest in computational physics as well as computational aspects of quantum mechanical methods.

#### 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
- Favorite graduate teacher at the Department of Physics and Astronomy at Michigan State University, 2016

## Citation metrics, highly cited articles, and additional research highlights:

- 1. Google scholar h-index=48, (August 2016)
- 2. ISI web of science h-index=42 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 676 times (Google Scholar)

- 4. Phases of dense matter in neutron stars, H Heiselberg, M Hjorth-Jensen, Physics Reports 328, 237-327 (2000), cited 393 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 334 times (Google Scholar)
- 6. A total of 144 peer reviewed articles and four books to be published.
- 7. Supervised and co-supervised 60 graduate students (48 Master of Science and 12 PhD students)
- 8. Authored and co-authored 22 Physical Review Letters articles, 15 Rapid communications in Physical Review C, seven Physics Letters B articles, one Astrophysical Journal Letters article and one Nature Physics article
- 9. Written one Physics viewpoint and been highlighted in one other.
- 10. Taught and developed several courses in Computational Physics and manybody physics, courses in nuclears structure and quantum physics and mechanics and statistical mechanics.
- 11. More than two hundred invited talks, seminars, colloquia and lectures given worldwide.
- 12. Organized more than 30 conferences, workshops and schools and advanced courses.
- 13. Presently supervising 7 Master of Science students (University of Oslo) and four PhD students (MSU)

## Synergistic Activities and service through the years:

- 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 48 Master of Science of students (28 have continued with PhD studies) and twelve 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 amd 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 initiate": "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 developed eleven courses. I chaired the steering committee from its beginning in 2010 till 2015. I have taught two of these courses and been one of the organizers on five of the eleven courses.
- 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.
- I initiated and lead the new Master of Science program on Computational Science at the University of Oslo. This is a new and multi-disciplinary program across several disciplines at the College of Natural Science of the University of Oslo. It includes now six departments at the University of Oslo.

#### Editorial boards and committees.

- Member of the Physics Advisory Comittee 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 (2014-2016)
- Editorial Board member of European Physical Journal A (2010-2016)
- Editorial Board member of European Physical Journal Special Topics (2010-present)
- Editorial Board member of Springer's Lecture Notes in Physics (2010-present)

- Editorial Board member of Springer's Undergraduate Lecture Notes in Physics (2014-present)
- Editorial board member of Computers in Science and Discovery journal, a journal by IOP, UK (2008-2014)
- 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
- $\bullet$  Referee for Physical Review  ${\bf D}$
- Referee for Nuclear Physics A
- $\bullet\,$  Referee for Physics Letters  ${\bf B}$
- 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
- Referee for Progress in Theoretical Physics
- Referee for Polish Journal of 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 Resource Council

- Referee for the Serbian Research Ministry
- Referee for the Russian Research Council
- Opponent at several PhD dissertations.
- Member of 19 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

## Member of International Advisory committees.

- 1. International Nuclear Physics Conference, member of IAC since 2008
- 2. Nuclear Structure 2010 and 2014, member of IAC
- 3. Program Advisor Committee for Recent Progress in Many-Body Theories, member since 2007
- 4. Scientific advisory committee for Nuclear Theory in the Supercomputing Era
- 5. International Advisory committee of International Conference on Mathematical Modeling in Physical Sciences
- 6. International Advisory committee for XI Latin American Symposium on Nuclear Physics and Applications
- 7. International Advisory Board for Conference on Computational Physics
- 8. International Advisory committee for EURORIB15
- 9. International Advisory committee for SIAM conference on Computational Science and Engineering in Boston, 2013

Member of Advisory Committees at Michigan State University. I am member or chair person of the following graduate student committees at Michigan State University:

- 1. Justin Lietz, chair
- 2. Fei Yuan, chair together with Scott Bogner
- 3. Sam Novario, chair
- 4. John Bower, chair together with Scott Bogner
- 5. Adam Jones, committee member

- 6. Chris Sullivan, committee member
- 7. Thomas Redpath, committee member
- 8. Sean Sweany, committee member
- 9. Rachel Taverner, committee member
- 10. Nathan Parzuchowski, committee member
- 11. Titus Morris, committee member. Defended thesis May 2016
- 12. Kenneth Whitmore, committee member. Defends thesis June 2016
- 13. Alex Dombos, committee member
- 14. Josh Bradt, committee member
- 15. Charles Loelius, committee member
- 16. Safwan Shanab, committee member
- 17. Hao Lin, committee member
- 18. Mao Xingze, committee member
- 19. Amy Lovell, committee member
- 20. Debra Richman, committee member
- 21. Roy Ready, committee member
- 22. Nathan Watwood, committee member

## Courses, study programs and educational initiatives

I am strongly involved in teaching at all levels. I have been heading the bachelor program Physics, Astronomy and Meteorology (FAM) in the period 2002-2011. I am also strongly involved in the project Computing in Science Education. Furthermore, with European and American colleagues, we have established the recent successful Nuclear Talent initiative.

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 48 Master of Science of students (28 have continued with PhD studies) and twelve 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 amd 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 initiate": "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.

I initiated in 2015 and chair the new Master of Science program on Computational Science at the University of Oslo. This is a new and multi-disciplinary program across several disciplines at the College of Natural Science of the University of Oslo.

I teach now the following courses at the University of Oslo and Michigan State University:

- FYS3150/4150 Computational Physics I, Fall semester, senior undergraduate level (Oslo)
- FYS4411 Computational Physics II: Quantum mechanical systems, graduate level, Spring semester (Oslo)
- FYS-KJM4480 Quantum mechanics for many-particle systems, graduate level, Fall semester (Oslo)
- PHYS981 Nuclear Structure, graduate level, Spring semester (MSU)
- PHY480/905 Computational Physics (MSU), undergraduate and graduate level, Spring semester

I have also taught introductory quantum physics (FYS2140, 2000-2004) and Statistical Mechanics (FYS4130, 1990-1994) at the University of Oslo, Norway.

## Teaching Awards:

- University of Oslo award for excellence in teaching (all university), 2000, 250000 NOK
- 2. University of Oslo award for excellence in teaching for the **Computing** in Science Education project (all university), 2011, 250000 NOK
- 3. NOKUT (Norwegian entity of quality assessment in higher education) award for excellence in teaching for the Computing in Science Education project, 2012. National award. 300000 NOK

- 4. University of Oslo award for excellence in teaching for developing the Computational Physics group (all university), 2015. 250000 NOK
- 5. Favorite graduate teacher at the Department of Physics and Astronomy of Michigan State University, 2016

#### 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

### Present Master of Science Students.

- 1. Håkon Emil Kristiansen, University of Oslo, (2015-2017)
- 2. Christian Fleischer, University of Oslo, (2015-2017)
- 3. Sean Bruce Sangholt Miller, University of Oslo, (2015-2017)
- 4. Alexander Fleischer, University of Oslo, (2015-2017)
- 5. Morten Ledum, University of Oslo, (2015-2017), co-supervisor
- 6. Håkon Treider Vikør, University of Oslo, (2015-2017), co-supervisor
- 7. Jon-Andreas Stende, University of Oslo, (2015-2017), co-supervisor

## Former PhD students and their present positions.

- 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 Sørensen (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 (co-supervisor)

- 6. Marius Lysebo (PhD UiO 2010), now Associate Professor at Oslo University College, (co-supervisor)
- 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
- 11. Øystein Elgarøy (PhD UiO 1999), now professor of Theoretical Astrophysics at the University of Oslo, Norway (co-supervisor)
- 12. Lars Engvik (PhD UiO 1999), now Associate Professor at Sør-Trøndelag University College, Trondheim, Norway, (co-supervisor)

## Post-doctoral fellows and their present positions.

- 1. Andreas Ekstrøm (UiO and MSU 2010-2014), now researcher at Chalmers Technological University in Gothenburg, Sweden
- Øyvind 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 teacher at Ås high school, Norway
- Sølve Selstø (UiO 2008-2010), now Associate Professor at Oslo University College
- 6. Nicolas Michel (MSU 2013), now senior researcher at Michigan State University

#### Former Master of Science Students(links to their thesis will be added).

- 1. Wilhelm Holmen, University of Oslo (2014-2016)
- 2. Roger Kjøde, University of Oslo, (2014-2016)
- 3. Håkon Sebatian Mørk, University of Oslo, (2014-2016)
- 4. Jonas van den Brink, University of Oslo, (2014-2016), co-supervisor

- 5. Marte Julie Sætra, University of Oslo, (2014-2016), co-supervisor
- 6. Audun Skau Hansen, University of Oslo, (2013-2015)
- 7. Henrik Eiding, University of Oslo, (2012-2014)
- 8. Svenn-Arne Dragly, University of Oslo, (2012-2014)
- 9. Milad Hobbi Mobarhan, University of Oslo, (2012-2014)
- 10. Ole Tobias Norli, University of Oslo, (2012-2014)
- 11. Filip Sand, University of Oslo, (2012-2014), co-supervisor
- 12. Emilie Fjørner, University of Oslo, (2012-2014), co-supervisor
- 13. Jørgen Høgberget, University of Oslo, (2011-2013)
- 14. Sarah Reimann, University of Oslo, (2011-2013)
- 15. Karl Leikganger, University of Oslo, (2011-2013)
- 16. Sigve Bøe Skattum, University of Oslo, (2011-2013)
- 17. Veronica Berglyd Hansen, University of Oslo, (2010-2012)
- 18. Camilla Nestande Kirkemo, University of Oslo, (2010-2012), co-supervisor
- 19. Christoffer Hirth, University of Oslo, (2009-2011)
- 20. Marte Hoel Jørgensen, University of Oslo, (2009-2011)
- 21. Yang Min Wang, University of Oslo, (2009-2011)
- 22. Ivar Nikolaisen, University of Oslo, (2009-2011)
- 23. Vegard Amundsen, University of Oslo, (2008-2010)
- 24. Håvard Sandsdalen, University of Oslo, (2008-2010)
- 25. Lars Eivind Lervåg, University of Oslo, (2008-2010)
- 26. Magnus Lohne Pedersen, University of Oslo, (2008-2010)
- 27. Simen Sørby, University of Oslo, (2008-2010), co-supervisor
- 28. Sigurd Wenner, University of Oslo, (2008-2010), co-supervisor
- 29. Lene Norderhaug Drøsdal, University of Oslo, (2007-2009)
- 30. Islen Vallejo, University of Oslo, (2007-2009)
- 31. Jacob Kryvi, Norwegian University of Science and Technology, (2007-2009), co-supervisor

- 32. Rune Albrigtsen, University of Oslo, (2007-2009)
- 33. Johannes Rekkedal, University of Oslo, (2007-2009)
- 34. Patrick Merlot, University of Oslo, (2007-2009)
- 35. Gustav Jansen, University of Oslo, (2006-2008)
- 36. Ole Petter Harbitz, University of Oslo, (2006-2008)
- 37. Sutharsan Amurgian, University of Oslo, (2005-2007)
- 38. Jon Thonstad, University of Oslo, (2005-2007)
- 39. Espen Flage-Larsen, University of Oslo, (2003-2005)
- 40. Joachim Berdahl Haga, University of Oslo, (2004-2006)
- 41. Jon Kerr Nilsen, University of Oslo, (2002-2004)
- 42. Simen Kvaal, University of Oslo, (2002-2004)
- 43. Simen Reine Sommerfelt, University of Oslo, (2002-2004)
- 44. Mateuz Marek Røstad, University of Oslo, (2002-2004)
- 45. Victoria Popsueva, University of Oslo, (2002-2004)
- 46. Eivind Brodal, University of Oslo, (2001-2003)
- 47. Eirik Ovrum, University of Oslo, (2001-2003)
- 48. Ronny Kjelsberg, Norwegian University of Science and Technology, (2001-2003)

#### Lectures and organization of schools:

- Hjorth-Jensen, Morten, Computational Nuclear Physics and Post Hartree-Fock Methods. Configuration Interaction Theory, Many-Body Perturbation Theory and Coupled Cluster Theory, five lectures at 28th Indian-Summer School on Ab Initio Methods in Nuclear Physics, Prague, Czech Republic, August 29 - September 2, 2016.
- 2. Hjorth-Jensen, Morten, Computational Physics and Quantum Mechanical Systems, one week course on Computational Physics at the University of Tunis El Manar, Tunis, Tunisia, May 16-20, 2016. In total 15 hours of lectures and 15 hours of computer lab and exercises.
- Co-organizer with Giuseppina Orlandini and Alejandro Kievsky of Nuclear Talent course Few-body methods and nuclear reactions, ECT\*, Trento, Italy, July 20-August 7 2015

- 4. Carlo Barbieri, Wim Dickhoff, Gaute Hagen, Morten Hjorth-Jensen, and Artur Polls, Nuclear Talent course on Many-body methods for nuclear physics, GANIL, Caen, France, July 5-25 2015. Main organizer and teacher with in total five hours of lectures.
- 5. Hjorth-Jensen, Morten, ECT\* Doctoral Training Program 2015 on Computational Nuclear Physics, April 13- May 22, ECT\*, Trento, Italy. I taught the last week of the lecture series. In total I have ten one hour lectures.
- Hjorth-Jensen, Morten, Nuclear Talent School in Nuclear Astrophysics, co-organizer with Richard Cyburt and Hendrik Schatz of the Nuclear Talent course on Nuclear Astrophysics, Michigan State University, May 26 - June 13, 2014.
- 7. Hjorth-Jensen, Morten, Nuclear Talent course on Density Functional theories, co-organizer with Scott Bogner, Nicolas Schunck, Dario Vretenar and Peter Ring, European Center for Theoretical Nuclear Physics and Related Areas, Trento, Italy, July 13 -August 1 2014.
- 8. Hjorth-Jensen, Morten, Nuclear Talent Course Introduction on Highperformance computing and computational tools for nuclear physics; ECT\*, Trento, Italy, June 24 - July 13 2012. Main organizer and teacher together with Francesco Pederiva, Kevin Schmidt and Calvin Johnson.
- 9. Hjorth-Jensen, Morten. Computational environment for Nuclear Structure, five lectures in Nuclear Physics at Universidad Complutense Madrid; 2011-01-17 2011-02-09
- Hjorth-Jensen, Morten, organizer with David Dean, Thomas Papenprock and Gaute Hagen. Third MSU-UT/ORNL-UiO winter school in nuclear physics; Oak Ridge National Lab, Tennessee, January 2012
- 11. Hjorth-Jensen, Morten, organizer with Alex Brown and teaching five lectures. Second MSU-UT/ORNL-UiO winter school in nuclear physics, East Lansing, Michigan, USA; 2011-01-03 2011-01-07
- 12. Hjorth-Jensen, Morten, organizer, First MSU-UT/ORNL-UiO winter school in nuclear physics, Wadahl, Norway, January 4-10 2010
- 13. Hjorth-Jensen, Morten. Five lectures on Theory of shell-model studies for nuclei. CERN/Isolde course on nuclear structure theory; 2010-03-01-2010-03-04
- Hjorth-Jensen, Morten. Six lectures on Nuclear interactions and the Shell Model. 8th CNS-EFES International Summer School, Riken, Tokyo, Japan, 2009-08-26 - 2009-09-01
- 15. Hjorth-Jensen, Morten. Five lectures on nuclear theory at the 20th Chris Engelbrecht Summer School in Theoretical Physics, Stellenbosch, South Africa, 2009-01-19 2009-01-28

- Hjorth-Jensen, Morten. Nuclear many-body theory, five lectures at the UK Postgraduate Nuclear Physics Summer School, Leicester, UK, 2009-09-12 -2009-09-23
- 17. Hjorth-Jensen, Morten. Nuclear many-body methods. Lectures series at Lund University; 2008-05-04 2008-05-07
- 18. Hjorth-Jensen, Morten. Trends in Nuclear Structure Theory. Workshop at the University of Lund; 2008-05-07 2008-05-07
- 19. Hjorth-Jensen, Morten. Trends in Nuclear Structure Theory. Physics Division Seminar; 2008-04-17 2008-04-17
- Hjorth-Jensen, Morten. Trends in nuclear structure theory. Lecture series at the University of Padova and Legnaro National Laboratory, Padova Italy; 2008-07-16 - 2008-07-19
- 21. Hjorth-Jensen, Morten. Five lectures on Monte Carlo methods and applications in the physical sciences. eScience Winther School 2007; Geilo, Norway 2007-01-28 2007-02-02
- 22. Hjorth-Jensen, Morten. Five lectures at the ISOLDE Spring School in Nuclear Theory; CERN, Switzerland, 2007-05-21 2007-05-26
- 23. Hjorth-Jensen, Morten. Ten lecures at ECT\* Doctoral Training Programme 2007; Trento, Italy, April 16-20
- 24. Hjorth-Jensen, Morten. From the nucleon-nucleon interaction to a renormalized interaction for nuclear systems. Lecture series at Michigan State University; April 2005
- Hjorth-Jensen, Morten. CENS: A computational Environment for Nuclear Structure. Isolde Lecture series; 2004-11-11 - 2005-11-25

# Research, Publications, books, refereed scientific articles, talks and research grants

#### **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. Erich W. Ormand, Alex B. Brown and Morten Hjorth-Jensen, First-principles calculations for c-coefficients of the isobaric mass multiplet equation in the 1p0f shell, submitted to Physical Review Letters, arXiv1608.08127 (2016).
- 2. Justin Lietz, Sam Novario, Gustav, Jansen, Gaute Hagen, and Morten Hjorth-Jensen, *High-performance computing and infinite nuclear matter*, *Lecture Notes in Physics*, Editors M. Hjorth-Jensen, M.P. Lombardo and U. van Kolck, (Springer, in press, 2016).
- 3. Fei Yuan, Jørgen Høgberget, Titus Morris, Sam Novario, Nathan Parzuchowski, Sarah Reimann, Scott K. Bogner and Morten Hjorth-Jensen, First principle calculations of quantum dot systems, in preparation for Journal of Chemical Physics, 2016.
- G. Hagen, M. Hjorth-Jensen, G. R. Jansen, T. Papenbrock, Emergent properties of nuclei from ab initio coupled-cluster calculations, Focus issues of Physica Scripta, 91:063006 (2016).
- 5. Naofumi Tsunoda, Takaharu Otsuka, Noritaka Shimizu, Morten Hjorth-Jensen, Kazuo Takayanagi, Toshio Suzuki, Exotic neutron-rich mediummass nuclei with realistic nuclear forces, submitted to Physical Review C, arXiv1601.06442 (2016).
- 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, 12:186–190 (2016).
- 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).
- 8. 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).
- 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).
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- 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 25F, *Physical Review C*, 89:054323 (2014).
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## Talks, lectures and seminars at workshops, conferences, schools and institute colloquiua.

- Hjorth-Jensen, Morten, Computational Nuclear Physics and Post Hartree-Fock Methods. Configuration Interaction Theory, Many-Body Perturbation Theory and Coupled Cluster Theory, five lectures at 28th Indian-Summer School on Ab Initio Methods in Nuclear Physics, Prague, Czech Republic, August 29 - September 2, 2016.
- 2. Hjorth-Jensen, Morten, Computational Physics and Quantum Mechanical Systems, one week course on Computational Physics at the University of Tunis El Manar, Tunis, Tunisia, May 16-20, 2016. In total 15 hours of lectures and 15 hours of computer lab and exercises.
- 3. Hjorth-Jensen, Morten, Correlations in many-body systems; from condensed matter physics to nuclear physics, T-2, Nuclear and Particle Physics, Astrophysics and Cosmology, Los Alamos National Laboratory, New Mexico, USA, Tuesday, April 12, 2016

- Hjorth-Jensen, Morten, Integrating a Computational Perspective in the Basic Science Education, Department of Physics Colloquium at Central Michigan University, Kalamazoo, Michigan, USA, April 4, 2016
- Co-organizer with Giuseppina Orlandini and Alejandro Kievsky of Nuclear Talent course Few-body methods and nuclear reactions, ECT\*, Trento, Italy, July 20-August 7 2015
- Carlo Barbieri, Wim Dickhoff, Gaute Hagen, Morten Hjorth-Jensen, and Artur Polls, Nuclear Talent course on Many-body methods for nuclear physics, GANIL, Caen, France, July 5-25 2015. Main organizer and teacher with in total five hours of lectures.
- 7. Hjorth-Jensen, Morten, ECT\* Doctoral Training Program 2015 on Computational Nuclear Physics, April 13- May 22, ECT\*, Trento, Italy. I taught the last week of the lecture series. In total I have ten one hour lectures.
- Hjorth-Jensen, Morten, Correlations in many-body systems, from condensed matter physics to nuclear physics, invited talk at Clarkfest 15, conference in honor of John W Clark, Wayman Crow Professor of Physics, Washington University in St. Louis, Missouri, April 27-28 2015.
- Hjorth-Jensen, Morten, Correlations in many-body systems, from condensed matter physics to nuclear physics, Nuclear Physics Seminar, Iowa State University, Ames, Iowa, April 22 2015.
- 10. Hjorth-Jensen, Morten, Nuclear physics education and the national FRIB theory center, plus some cool ways to organize your lectures, special seminar, Iowa State University, Ames, Iowa, April 23 2015.
- 11. Hjorth-Jensen, Morten, Integrating a Computational Perspective in the Basic Science Education, Special Lectures and Events, Notre Dame University, South Bend, Indiana, March 30 2015.
- 12. Hjorth-Jensen, Morten, Computing in Science Education. Integrating a Computational Perspective in the Basic Science Education, Physics Colloquium, Central Michigan University, Mt Pleasant, March 19 2015.
- 13. Hjorth-Jensen, Morten, From Nuclei to Neutron Stars: Why Is Matter Stable? Physics Colloquium, Ohio University, Athens, Ohio, February 27 2015.
- 14. Hjorth-Jensen, Morten, Computing in Science Education. Integrating a Computational Perspective in the Basic Science Education, condensed matter seminar, Ohio University, Athens, Ohio, February 26 2015.
- 15. Hjorth-Jensen, Morten, Theory challenges around 78Ni and 132Sn, invited talk at RIBSS Center retreat and CSAC, Michigan State University, June 11-13 2014.

- 16. Hjorth-Jensen, Morten, Living at the edge of stability, understanding the limits of the nuclear landscape, Institute colloquium, Department of Physics, Lousiana State University, Baton Rouge, Lousiana, April 3 2014.
- 17. Hjorth-Jensen, Morten, Computing in Science education, how to introduce a computational perspective in the basic science education, special colloquium Department of Physics, Lousiana State University, Baton Rouge, Lousiana, April 4 2014.
- Hjorth-Jensen, Morten, Correlations in Nuclei and Quantum Dots, invited talk at The Fourth Conference on NUCLEI and MESOSCOPIC PHYSICS, Michigan State University, May 5-9 2014.
- Hjorth-Jensen, Morten, Nuclear Talent School in Nuclear Astrophysics, co-organizer with Richard Cyburt and Hendrik Schatz of the Nuclear Talent course on Nuclear Astrophysics, Michigan State University, May 26 - June 13, 2014.
- 20. Hjorth-Jensen, Morten, Nuclear Talent course on Density Functional theories, co-organizer with Scott Bogner, Nicolas Schunck, Dario Vretenar and Peter Ring, European Center for Theoretical Nuclear Physics and Related Areas, Trento, Italy, July 13 -August 1 2014.
- 21. Hjorth-Jensen, Morten. Living at the edge of stability, understanding the limits of the nuclear landscape. Institute colloquium Centre Etudes Nucléaires de Bordeaux Gradignan; 2013-12-10 2013-12-10
- 22. Hjorth-Jensen, Morten. Educating the next generation of nuclear scientists; how can a center like the ECT\* aid in developing modern nuclear physics educational programs?. ECT\* 20th anniversary colloquium; 2013-09-14 2013-09-14
- 23. Hjorth-Jensen, Morten. Living at the edge of stability, understanding the limits of the nuclear landscape; computational and algorithmic challenges. XXV IUPAP Conference on Computational Physics, August 20, 2013-August 24, 2013, Moscow, Russia; 2013-08-20 2013-08-24
- 24. Hjorth-Jensen, Morten. Living at the edge of stability, understanding the nuclear landscape. Theory seminar National Superconducting Cyclotron Laboratory; 2013-03-19 2013-03-19
- Hjorth-Jensen, Morten. Living on the edge of stability, the limits of nuclear landscape. Physics Division seminar, Argonne National Laboratory, Illinois, USA; 2013-06-05 - 2013-06-05
- 26. Hjorth-Jensen, Morten. Living on the edge of stability, the limits of the nuclear landscape. Institute colloquium; 2013-03-22 2013-03-22

- 27. Hjorth-Jensen, Morten. Living on the edge of stability, understanding the limits of the nuclear landscape. Nuclear Theory in the Supercomputing Era; 2013-05-13 2013-05-17
- 28. Hjorth-Jensen, Morten. Computing in Science Education. Seminar at college of engineering; 2012-03-15 2012-03-15
- 29. Hjorth-Jensen, Morten. Computing in Science Education, a new way to teach science?. Institute seminar The Ohio State University; 2012-02-28 2012-02-28
- Hjorth-Jensen, Morten. Evolution of shell structure in neutron-rich isotopes.
  Research seminar National Superconducting Cyclotron Laboratory; 2012-03-15 - 2012-03-15
- 31. Hjorth-Jensen, Morten. Evolution of shell structure in neutron-rich isotopes and the stability of nuclear matter. Exotic Nuclear Structure from Nucleons; 2012-10-10 2012-10-12
- 32. Hjorth-Jensen, Morten. Introduction to computational nuclear physics. High-performance computing and computational tools for nuclear physics; 2012-06-24 2012-07-13
- 33. Hjorth-Jensen, Morten. Lecture 2: Configuration interaction theory. High-performance computing and computational tools for nuclear physics; 2012-06-24 2012-07-13
- 34. Hjorth-Jensen, Morten. Lectures 3-5: Configuration interaction theory and computational nuclear physics. High-performance computing and computational tools for nuclear physics; 2012-06-24 2012-07-13
- 35. Hjorth-Jensen, Morten. Shell Structure in Neutron-rich isotopes and the stability of nuclear matter. Berkeley Lab Colloquia 2012; 2012-05-30 2012-05-30
- 36. Hjorth-Jensen, Morten. Understanding the stability of nuclear matter. Nuclear streuture seminar The Ohio State University; 2012-02-29 2012-02-29
- 37. Hjorth-Jensen, Morten. Understanding the stability of nuclear matter. Triangle Nuclear Theory Colloquium; 2012-05-01 2012-05-01
- 38. Hjorth-Jensen, Morten. Why is matter stable?. Theory of Nuclear Physics Related to the RI Facilities; 2012-05-11 2012-05-12
- 39. Hjorth-Jensen, Morten. Why is matter stable? Understanding the limits of stability of nuclear matter. Nobel Symposium 152; 2012-06-10 2012-06-15
- 40. Hjorth-Jensen, Morten. Computational environment for Nuclear Structure, Lectures I-V. Lecture series in Nuclear Physics at Universidad Complutense Madrid; 2011-01-17 2011-02-09

- 41. Hjorth-Jensen, Morten. Computers in Science Education; a new way to teach Science?. Institute seminar; 2011-03-21 2011-03-21
- 42. Hjorth-Jensen, Morten. Computers in Science Education; a new way to teach Science?. Seminar at Universidad Complutense Madrid; 2011-01-24 2011-01-24
- 43. Hjorth-Jensen, Morten. From few to many nucleons; a tale on recent advances (and challenges) in nuclear many-body theory. Institute seminar; 2011-03-25 2011-03-25
- 44. Hjorth-Jensen, Morten. Linking nuclear forces with many-body methods, Lecture II. Second MSU–UT/ORNL winter school in nuclear physics; 2011-01-03 2011-01-07
- 45. Hjorth-Jensen, Morten. Many-body interactions and nuclear structure. Institute seminar National Superconducting Cyclotron laboratory; 2011-01-05 2011-01-05
- 46. Hjorth-Jensen, Morten. Many-body interactions and nuclear structure. Seminar at Universidad Complutense Madrid; 2011-01-18 2011-01-18
- 47. Hjorth-Jensen, Morten. Many-body interactions and nuclear structure at the limits of stability. Institute seminar; 2011-03-22 2011-03-22
- Hjorth-Jensen, Morten. Many-body interactions and nuclear structure at the limits of stability. Nordic Nuclear Physics conference 2011; 2011-06-13 - 2011-06-17
- 49. Hjorth-Jensen, Morten. Many-body interactions and nuclear structure at the limits of stability. Nuclear Physics in Astrophysics V; 2011-04-03 2011-04-09
- 50. Hjorth-Jensen, Morten. Many-body methods, Lecture III. Second MSU–UT/ORNL winter school in nuclear physics; 2011-01-03 2011-01-07
- 51. Hjorth-Jensen, Morten. Many-body methods, Lectures IV and V. Second MSU–UT/ORNL winter school in nuclear physics; 2011-01-03 2011-01-07
- 52. Hjorth-Jensen, Morten. Nuclear structure at the limits of stability. Division of Nuclear Physics Meeting 2011; 2011-10-25 2011-10-29
- 53. Hjorth-Jensen, Morten. Parallel programming with MPI. The 10th Annual Meeting on High Performance Computing and Infrastructure in Norway; 2011-05-23 2011-05-27
- 54. Hjorth-Jensen, Morten. Renormalization of nuclear forces, Lecture set I. Second MSU–UT/ORNL winter school in nuclear physics; 2011-01-03 2011-01-07

- 55. Hjorth-Jensen, Morten. Computers in Science Education. Institute seminar at the university of Trento, Italy; 2010-05-05 2010-05-05
- 56. Hjorth-Jensen, Morten. Deriving nuclear forces. CERN/Isolde course on nuclear structure theory; 2010-03-01 2010-03-04
- 57. Hjorth-Jensen, Morten. From few to many nucleons; a tale on recent advances (and challenges) in nuclear many-body theory. Institute seminar; 2010-07-22 2010-07-22
- 58. Hjorth-Jensen, Morten. From few to many nucleons; a tale on recent advances (and challenges) in nuclear many-body theory. Spiral2 week 2010; 2010-01-25 - 2010-01-29
- 59. Hjorth-Jensen, Morten. High-performance computing and quantum mechanical problems. Future needs for eInfrastructure for Norwegian research, March 19 2010; 2010-03-19 2010-03-19
- 60. Hjorth-Jensen, Morten. Many-body interactions and nuclear structure. New faces of atomic nuclei; 2010-11-15 2010-11-17
- 61. Hjorth-Jensen, Morten. Many-body methods for nuclear structure studies. CERN/Isolde course on nuclear structure theory; 2010-03-01 2010-03-04
- Hjorth-Jensen, Morten. Many-body theory for exotic nuclei and coupledcluster theory. CERN/Isolde course on nuclear structure theory; 2010-03-01 - 2010-03-04
- 63. Hjorth-Jensen, Morten. Modern theory of effective interactions. Zakopane Conference On Nuclear Physics 2010; 2010-08-30 2010-09-05
- 64. Hjorth-Jensen, Morten. Overview of nuclear forces. CERN/Isolde course on nuclear structure theory; 2010-03-01 2010-03-04
- 65. Hjorth-Jensen, Morten. Renormalizing nuclear forces. CERN/Isolde course on nuclear structure theory; 2010-03-01 2010-03-04
- 66. Hjorth-Jensen, Morten. Role of many-body forces in nuclei. CERN/Isolde course on nuclear structure theory; 2010-03-01 2010-03-04
- 67. Hjorth-Jensen, Morten. Role of the tensor force in nuclear spectra. CERN/Isolde course on nuclear structure theory; 2010-03-01-2010-03-04
- 68. Hjorth-Jensen, Morten. Shell structure and modern effective interactions. International Nuclear Physics Conference 2010; 2010-07-04 2010-07-09
- Hjorth-Jensen, Morten. Theory of shell-model studies for nuclei. CERN/Isolde course on nuclear structure theory; 2010-03-01 - 2010-03-04
- 70. Hjorth-Jensen, Morten. Ab initio methods in nuclear physics. Overview and recent achievements. Assemblée Générale des Théoriciens, 15 et 16 octobre, IPN-Orsay; 2009-10-15 2009-10-16

- 71. Hjorth-Jensen, Morten. Can we do ab initio calculations for nuclei beyond A=16?. 7th Biennal Yale Nuclear structure workshop; 2009-06-18 2009-06-21
- 72. Hjorth-Jensen, Morten. Computers in Science Education. Institutt kollokvium; 2009-04-28 2009-04-28
- 73. Hjorth-Jensen, Morten. Datamaskiner i realfagsopplæringen, en ny måte å undervise realfag på?. Institutt kollokvium; 2009-02-13 2009-02-13
- 74. Hjorth-Jensen, Morten. From QCD to the nuclear many-body problem: theory and experiments at Isolde. New Opportunities in the Physics Landscape at CERN Search; 2009-05-10 2009-05-13
- 75. Hjorth-Jensen, Morten. Lecture 1: Models for the nuclear forces. 20th Chris Engelbrecht Summer School in Theoretical Physics; 2009-01-19 2009-01-28
- Hjorth-Jensen, Morten. Lecture 1: Nuclear interactions. Postgraduate Nuclear Physics Summer School '09; 2009-09-12 - 2009-09-23
- Hjorth-Jensen, Morten. Lecture 1: Nuclear interactions and the Shell Model. 8th CNS-EFES International Summer School; 2009-08-26 - 2009-09-01
- 78. Hjorth-Jensen, Morten. Lecture 2: Constructing effective interactions for the shell model. Postgraduate Nuclear Physics Summer School '09; 2009-09-12 2009-09-23
- 79. Hjorth-Jensen, Morten. Lecture 2: Nuclear interactions and the shell model. 8th CNS-EFES International Summer School; 2009-08-26 2009-09-01
- 80. Hjorth-Jensen, Morten. Lecture 2: Renormalization of nuclear forces. 20th Chris Engelbrecht Summer School in Theoretical Physics; 2009-01-19 2009-01-28
- 81. Hjorth-Jensen, Morten. Lecture 3: Effective interactions. 20th Chris Engelbrecht Summer School in Theoretical Physics; 2009-01-19 2009-01-28
- 82. Hjorth-Jensen, Morten. Lecture 3: Nuclear interactions and the shell model. 8th CNS-EFES International Summer School; 2009-08-26 2009-09-01
- 83. Hjorth-Jensen, Morten. Lecture 3: Shell model studies. Postgraduate Nuclear Physics Summer School '09; 2009-09-12 2009-09-23
- 84. Hjorth-Jensen, Morten. Lecture 4: Nuclear interactions and the shell model. 8th CNS-EFES International Summer School; 2009-08-26 2009-09-01

- 85. Hjorth-Jensen, Morten. Lecture 4: Nuclear many-body methods. 20th Chris Engelbrecht Summer School in Theoretical Physics; 2009-01-19 2009-01-28
- 86. Hjorth-Jensen, Morten. Lecture 5: Nuclear interactions and the shell model. 8th CNS-EFES International Summer School; 2009-08-26 2009-09-01
- 87. Hjorth-Jensen, Morten. Lecture 5: Nuclear many-body methods. 20th Chris Engelbrecht Summer School in Theoretical Physics; 2009-01-19 2009-01-28
- 88. Hjorth-Jensen, Morten. Lecture 6: Nuclear interactions and the shell model. 8th CNS-EFES International Summer School; 2009-08-26 2009-09-01
- 89. Hjorth-Jensen, Morten. Many-body methods and multiscale physics: A nuclear physics story. Seminar at CTCC, University of oslo; 2009-11-04 2009-11-04
- 90. Hjorth-Jensen, Morten. School on Nuclear Physics at the University of Oslo. 15 lectures in total. Nuclear Physics School; 2009-08-10 2009-08-14
- 91. Hjorth-Jensen, Morten. Shell structure around 100Sn. Gordon conference:Frontiers Of Nuclear Structure Through Spectroscopy And Reactions; 2009-06-21 2009-06-26
- 92. Hjorth-Jensen, Morten. Shell-model interactions around 100Sn. American Physical Society April meeting; 2009-05-01 2009-05-05
- 93. Hjorth-Jensen, Morten. Structure of very neutron-rich nuclei and some key questions in nuclear structure theory. HRIBF, Upgrade for the FRIB Era An HRIBF Users Workshop; 2009-11-13 2009-11-14
- 94. Hjorth-Jensen, Morten. Effective interactions and convergence criteria for configuration interaction methods. Effective Field Theories and the Many-Body Problem; 2009-03-23 2009-06-05
- 95. Hjorth-Jensen, Morten. CENS, a computational environment for nuclear structure. April Meeting of the American Physical Society; 2008-04-11 2008-04-15
- Hjorth-Jensen, Morten. Cens lecture 1: Effective interactions for the nuclear shell model. Lecture series at the University of Padova and Legnaro National Laboratory, Padova Italy; 2008-07-15 - 2008-07-18
- Hjorth-Jensen, Morten. Cens lecture 2: Nuclear structure studies. Lecture series at the University of Padova and Legnaro national Laboratory, Padova, Italy; 2008-07-15 - 2008-07-18
- 98. Hjorth-Jensen, Morten. Cens lecture 3, challenges for nuclear structure studies. Lecture series at the University of Padova and Legnaro national Laboratory, Padova, Italy; 2008-07-15 2008-07-18

- 99. Hjorth-Jensen, Morten. Computers in Science Education. Guest lecture at Michigan State University; 2008-03-30 2008-03-30
- Hjorth-Jensen, Morten. Computers in Science Education. Forelesning ved UniK, Kjeller; 2008-10-23 - 2008-10-23
- 101. Hjorth-Jensen, Morten. Computers in Science education, a new way to teach science?. eNORIA: Workshop on eScience in Higher Education; 2008-10-07 - 2008-10-07
- 102. Hjorth-Jensen, Morten. From nuclear forces to the nuclear many-body problem. Carnegie 2008 Conference NUCLEAR STRUCTURE AT THE EXTREMES; 2008-05-08 - 2008-05-10
- 103. Hjorth-Jensen, Morten. From stable to weakly bound nuclei. Lectures series at Lund University; 2008-05-04 2008-05-07
- 104. Hjorth-Jensen, Morten. From the nucleon-nucleon interaction to effective interactions for the nuclear shell model. Lectures series at Lund University; 2008-05-04 - 2008-05-07
- 105. Hjorth-Jensen, Morten. Nuclear many-body methods, shell model and many-body perturbation theory. Lectures series at Lund University; 2008-05-04 - 2008-05-07
- 106. Hjorth-Jensen, Morten. Trends in Nuclear Structure Theory. Workshop at the University of Lund; 2008-05-07 - 2008-05-07
- 107. Hjorth-Jensen, Morten. Trends in Nuclear Structure Theory. Physics Division Seminar; 2008-04-17 2008-04-17
- 108. Hjorth-Jensen, Morten. Trends in nuclear structure theory. Lecture series at the University of Padova and Legnaro National Laboratory, Padova Italy; 2008-07-16 - 2008-07-16
- 109. Hjorth-Jensen, Morten; Langtangen, Hans Petter; Malthe-Sørenssen, Anders; Mørken, Knut Martin; Vistnes, Arnt Inge. Computers in Science Education, a new way to teach physics and mathematics?. April Meeting of the American Physical Society; 2008-04-11 2008-04-15
- 110. Hjorth-Jensen, Morten; Mørken, Knut Martin. Computers in Science Education A New Way to Teach Science?. "I POSE OG SEKK" Kvalitet i både forskning og utdanning. Er det mulig?; 2008-11-12 2008-11-13
- 111. Hjorth-Jensen, Morten; Mørken, Knut Martin. Computers in Science Education A New Way to Teach Science?. Møte i Nasjonalt råd for teknologisk utdanning; 2008-11-11 - 2008-11-11
- 112. Hjorth-Jensen, Morten. Challenges for nuclear many-body theories. COR-RELATIONS IN NUCLEI: BEYOND-MEAN-FIELD AND SHELL-MODEL APPROACHES; 2007-06-04 2007-06-08

- 113. Hjorth-Jensen, Morten. Computeres in Science Education, a new way to teach science?. Institute seminar; 2007-05-15 2007-05-15
- 114. Hjorth-Jensen, Morten. Computers in Science Education, a new way to teach science?. EUPEN's 9th General Forum EGF2007; 2007-09-06 2007-09-08
- 115. Hjorth-Jensen, Morten. Computers in Science Education: realfagsundervisning på en ny måte?. Pedagogisk modul for MN-fak; 2007-04-11 2007-04-11
- 116. Hjorth-Jensen, Morten. Coupled Cluster theories: from stable to weakly bound nuclei. CORRELATIONS IN NUCLEI: BEYOND-MEAN-FIELD AND SHELL-MODEL APPROACHES; 2007-06-04 2007-06-08
- 117. Hjorth-Jensen, Morten. Examples from the physical sciences and sociology. eScience Winther School 2007; 2007-01-28 2007-02-02
- 118. Hjorth-Jensen, Morten. How to Integrate Parallel Computing in Science Education?. High-Performance and Parallel Computing; 2007-10-24 2007-10-24
- 119. Hjorth-Jensen, Morten. Introduction to Monte Carlo methods and applications in the physical sciences. eScience Winther School 2007; 2007-01-28 2007-02-02
- 120. Hjorth-Jensen, Morten. Lecture 1: Models for the nuclear interactions. Lectures in Nuclear Physics, From basic nuclear interactions to nuclear structure; 2007-02-19 2007-02-19
- 121. Hjorth-Jensen, Morten. Lecture 1: Models for the nuclear interactions. ISOLDE Spring School in Nuclear Theory; 2007-05-21 2007-05-26
- 122. Hjorth-Jensen, Morten. Lecture 1: Models for the nuclear iteractions. ECT\* Doctoral Training Programme 2007; 2007-04-16 2007-04-16
- 123. Hjorth-Jensen, Morten. Lecture 2: Renormalization of the nucleon-nucleon interaction. Lectures in Nuclear Physics, From basic nuclear interactions to nuclear structure; 2007-02-20 2007-02-20
- 124. Hjorth-Jensen, Morten. Lecture 2: Renormalization of the nucleon-nucleon interaction. ISOLDE Spring School in Nuclear Theory; 2007-05-21 2007-05-26
- 125. Hjorth-Jensen, Morten. Lecture 2: Renormalization of the nucleon-nucleon interaction. ECT\* Doctoral Training Programme 2007; 2007-04-17 2007-04-17
- 126. Hjorth-Jensen, Morten. Lecture 3: Many-body methods for nuclear structure. Lectures in Nuclear Physics, From basic nuclear interactions to nuclear structure; 2007-02-21 2007-02-21

- 127. Hjorth-Jensen, Morten. Lecture 3: Many-body methods for nuclear structure. ISOLDE Spring School in Nuclear Theory; 2007-05-21 2007-05-26
- 128. Hjorth-Jensen, Morten. Lecture 3: Many-body methods for nuclear structure. ECT\* Doctoral Training Programme 2007; 2007-04-18 2007-04-18
- 129. Hjorth-Jensen, Morten. Lecture 4: Effective interactions for various mass areas. Lectures in Nuclear Physics, From basic nuclear interactions to nuclear structure; 2007-02-22 2007-02-22
- 130. Hjorth-Jensen, Morten. Lecture 4: Effective interactions for various mass areas. ISOLDE Spring School in Nuclear Theory; 2007-05-21 2007-05-26
- 131. Hjorth-Jensen, Morten. Lecture 4: Effective interactions for various mass areas. ECT\* Doctoral Training Programme 2007; 2007-04-19 2007-04-19
- 132. Hjorth-Jensen, Morten. Lecture 5: From stable to weakly bound nuclei. Lectures in Nuclear Physics, From basic nuclear interactions to nuclear structure; 2007-02-23 2007-02-23
- 133. Hjorth-Jensen, Morten. Lecture 5: From stable to weakly bound nuclei. ECT\* Doctoral Training Programme 2007; 2007-04-20 2007-04-20
- 134. Hjorth-Jensen, Morten. Random numbers, Markov chains, Diffusion and the Metropolis algorithm. eScience Winther School 2007; 2007-01-28 2007-02-02
- 135. Hjorth-Jensen, Morten. Trends in Nuclear Theory. SVENSKT KÄRN-FYSIKERMÖTE XXVII, 13-14 NOVEMBER, 2007; 2007-11-13 - 2007-11-14
- 136. Hjorth-Jensen, Morten. Two and three-body correlations in nuclei. COR-RELATIONS IN NUCLEI: BEYOND-MEAN-FIELD AND SHELL-MODEL APPROACHES; 2007-06-04 - 2007-06-08
- 137. Hjorth-Jensen, Morten; Dean, David J.; Hagen, Gaute; Papenbrock, Thomas. Complex Coupled-cluster Approach to an Ab-initio Description of Open Quantum Systems. Recent progress in many-body theories 14; 2007-07-16 - 2007-07-20
- 138. Hjorth-Jensen, Morten; Jansen, Gustav. CENS: computational environment for nuclear structure. Many-body physics workshop; 2007-12-05 2007-12-07
- 139. Hjorth-Jensen, Morten; Kvaal, Simen. Similarity Transformations, Flow Equations and Many-Body Perturbation Theory: Role of Many-Body Forces. Many-body physics workshop; 2007-12-05 - 2007-12-07
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