Biographical information

Morten Hjorth-Jensen[1,2]

[1]Department of Physics, University of Oslo, Norway
[2]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

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
10. 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=47, 8292 citations (August 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 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 many-body 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)

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.