

# Magdalena Kersting

## Curriculum Vitae

Department of Science Education  
University of Copenhagen  
Niels Bohr Building, Universitetsparken 5  
2100 Copenhagen Ø, Denmark  
✉ [mkersting@ind.ku.dk](mailto:mkersting@ind.ku.dk)  
🌐 [www.magdalenakersting.com](http://www.magdalenakersting.com)

### Research Experience

- 3/2022 - present **Tenure-track Assistant Professor of Science Education**, *Department of Science Education*, University of Copenhagen, Denmark
- 3/2020 - 2/2022 **Postdoctoral Researcher in Science Education**, *Department of Teacher Education and School Research*, University of Oslo, Norway, research project: Linking Instruction in Science and Student Impact (LISSI)
- 11/2019 **Visiting Research Fellow**, *Department of Engineering and Physics*, Karlstad University, Sweden, research project: Embodied cognition in science education funded by the European Association for Research on Learning and Instruction (EARLI)
- 5-7/2019 **Visiting Research Fellow**, *Centre for Astrophysics & Supercomputing*, Swinburne University of Technology, Australia, research project: Virtual reality in astronomy education and public outreach funded by the Research Council of Norway
- 8/2018-4/2019 **Visiting Research Fellow**, *School of Physics*, University of Western Australia & Gravity Discovery Centre, Australia, research project: Designing an astrophysics exhibition at the Gravity Discovery Centre funded by the Research Council of Norway and the European Science Education Research Association (ESERA)

### Education

- 9/2015–12/2019 **PhD in Physics Education**, *University of Oslo, Norway*  
Thesis: General Relativity in Secondary School - Research-Based Development of Learning Resources and Analyses of Students' Conceptual Understanding Using the Model of Educational Reconstruction
- 6/2015–4/2018 **Diploma Public Relations Management**, *Freie Journalistenschule, Berlin, Germany*  
Thesis: Communication at the crossroads of science and education
- 10/2012–3/2015 **Master of Science in Mathematics**, *University of Göttingen, Germany & University of Oslo, Norway*  
Thesis: Exotic Crossed Products: Constructions and Open Questions
- 8/2014–3/2015 **Master's Research Project**, *University of Oslo, Norway*  
funded by the German Academic Exchange Service

- 1–7/2013 **Exchange Semester**, *University of Oslo, Norway*  
funded by the European Community Action Scheme for the Mobility of University Students (ERASMUS)
- 10/2009–  
8/2012 **Bachelor of Science in Mathematics**, *University of Göttingen, Germany*  
Thesis: Konvexitätsätze in symplektischer Geometrie (Convexity theorems in symplectic geometry)
- 10/2008–  
8/2011 **Bachelor of Science in Physics**, *Max Planck Institute for Dynamics and Self-Organisation & University of Göttingen, Germany*  
Thesis: Reconstruction of Correlation Networks

## Professional Memberships

- ESERA **European Science Education Research Association**  
ASERA **Australasian Science Education Research Association**  
GIREP **International Research Group on Physics Teaching**  
EPS **European Physical Society**

## Professional Activities

- 2023–present **ESERA 2025 Co-Chair**, *Co-Chair of the ESERA 2025 conference to be held in Copenhagen*, the ESERA conference is one of the world's leading conferences on research in science education
- 2022–present **ESERA SIG Coordinator**, *Coordinator of the Special Interest Group Language & Literacies in Science Education of the European Science Education Research Association (ESERA)*
- 2022–present **IMPRESS Coordinator**, *Coordinator of the International Modern Physics & Research in Education Seminar Series (IMPRESS)*
- 2018–present **Reviewer**, *Journals: Science & Education, Physical Review Physics Education Research, International Journal of Science Education Part A & B, Research in Science Education, Journal of Science Education and Technology, Physics Education, Astronomy Education Journal, Pedagogies: An International Journal*
- 1-11/2021 **Deputy Project Leader**, *Deputy project leader of project LISSI (Linking Instruction in Science and Student Impact)*, University of Oslo
- 2020-2022 **Working Group Leader**, *Co-leader of the Education and Evaluation Working Group of the International Gravity Outreach Group (IGrav)*
- 2020-2022 **News & Site Admin**, *News & site admin for the COSER research group (Challenges of Sustainability in Educational Research)*, University of Oslo
- 7/2021 **PhD Mentor**, *Mentor for PhD students in science education at the annual summer school of the European Science Education Research Association (ESERA)*

- 3/2021 **Conference Session Chair**, *1st Electronic Conference on Universe ECU2021*, Session: Teaching Relativity and Modern Physics in General
- 2016–2017 **Events Officer**, *Events officer for UiODoc, the interest organisation for PhD students and postdocs at the University of Oslo*
- 2016 **Conference Committee Member**, *International Workshop on the Teaching and Learning of Einsteinian Physics*, Gravity Discovery Centre, Gingin, Australia

## █ Awards & Honours

- 2021 **New Philosopher Writers' Award**, *Winner of the New Philosopher Writers' Award XXX: Perception*, Winning piece: The interplay between nature and ourselves
- 2021 **Early Career Physics Communicator Commissioning Award**, *Institute of Physics*
- 2021 **New Philosopher Writers' Award**, *Runner-up for the New Philosopher Writers' Award XXXI: Space*, Runner-up piece: Spaces Without and Within
- 2021 **Young Leader in Physics**, *Invited participant at the American Physical Society's International Young Leaders Forum*
- 2020 **IAU PhD Prize**, *International Astronomical Union PhD Prize for outstanding scientific achievement*, Division: Education, Outreach and Heritage
- 2019 **Hartle Award for Best Oral Talk by a Student in Education & Public Outreach**, *GR22/Amaldi13 Conference in Valencia, Spain*, 22nd edition of the International Conference on General Relativity and Gravitation and the 13th edition of the Edoardo Amaldi Conference on Gravitational Waves
- 2019 **Best Oral Presentation of a Young Researcher in Physics Education**, *GIREP conference in Budapest, Hungary*, International Research Group on Physics Teaching
- 2017 **Winner of the Science on Stage National Competition in Norway**, Science on Stage in collaboration with the Norwegian Society of Graduate Technical and Scientific Professionals Tekna
- 2011 **Bachelor of Science in Physics with Distinction**, *Max Planck Institute for Dynamics and Self-Organisation & University of Göttingen*, Thesis: Reconstruction of Correlation Networks

## █ Grants & Scholarships

- 2019 **Qualification Scholarship**, *awarded by the Science Studies Colloquium Norway*  
Funding: 30.000 NOK for the research project "Einstein's Impact on Society"

- 2019 **Early Career Mentoring Grant**, awarded by the *European Association for Research on Learning and Instruction (EARLI)*  
 Funding: 2000 Euro to cover travel costs and accommodation during a research stay at Karlstad University
- 2018 **Personal Overseas Research Grant**, awarded by the *Norwegian Research Council*  
 Funding: 189.000 NOK to cover living expenses during research stays at the University of Western Australia and Swinburne University of Technology
- 2018 **Travel Grant**, awarded by the *European Science Education Research Association (ESERA)*  
 Funding: 1000 Euro to cover travel costs during a research stay at the University of Western Australia
- 2016 **Workshop Grant**, awarded by the *Norwegian Research Council*, joint application with the Research Section for Physics Education at the University of Oslo  
 Funding: 80.000 NOK to co-organise the International Workshop on the Teaching and Learning of Einsteinian Physics at Gravity Discovery Centre in Gingin, Australia
- 2014 **Promos Mobility Stipend**, awarded by the *German Academic Exchange Service*  
 Funding for a 7-months master's research project at the University of Oslo

## Teaching Experience

Currently, I teach undergraduate and graduate courses in science education and science communication at the Department of Science Education at the University of Copenhagen. I also supervise master and PhD students in science education research.

- 2022-present **Undergraduate and Graduate Courses, Lecturer & Course Responsible**, Copenhagen, Denmark
- (Autumn 2023) NNDM23000U - Science Education & Inquiry-based Science Teaching
  - (Autumn 2023) NNDK20004U - The Experimental Empirical Sciences
  - (Autumn 2023) NNDK22001U - Advanced Course in Science Education
  - (Spring 2023) NNDM23001U - Research Methods in Science Education
  - (Autumn 2022) NNDK20004U - The Experimental Empirical Sciences
  - (Autumn 2022) NNDK22001U - Advanced Course in Science Education
  - (Autumn 2022) NNDB19007U - Introduction to Science Communication
- 2020-2021 **Graduate Courses, Lecturer & Course Responsible**, Oslo, Norway
- (Spring 2022) NATDID4001 - Natural Sciences, Research & Schools
  - (Spring 2021) NATDID4001 - Natural Sciences, Research & Schools
  - (Autumn 2020) PPU3210 - Instruction & Learning Progression: Science Education
- 2016-2018 **Undergraduate and Graduate Courses, Teaching Assistant**, Oslo, Norway
- (Spring 2018) FYS4160 - General Relativity
  - (Spring 2017) FYS4160 - General Relativity
  - (Autumn 2016) FYS1120 - Electromagnetism

- 2014-2015 **Revision Courses, Lecturer**, Göttingen, Germany
- (4/2015) Multimedia Revision Course in Calculus
  - (3/2014) Revision Course in Calculus
- 2010-2014 **Undergraduate Courses, Teaching Assistant**, Göttingen, Germany
- (Winter 2013/14) Calculus
  - (Summer 2012) Complex Analysis
  - (Winter 2011/12) Calculus
  - (Summer 2011) Electrodynamics
  - (Winter 2010/11) Calculus
- 2009-2013 **Freshmen Courses, Course Reader**, Göttingen, Germany
- (9/2013) Mathematics for Agricultural Science and Forestry Students
  - (10/2010) Physics for Agricultural Science and Forestry Students
  - (9/2010) Mathematics for Physics and Mathematics Students
  - (10/2009) Physics for Agricultural Science Students

## Teacher Professional Development Workshops

I regularly develop and lead teacher professional development workshops.

- 4/2021 Bro AOF & Fagforum for Realfag Agder (virtual workshop)
- 7/2020 International Physics & Astronomy Educator Program of the LIGO Scientific Collaboration (virtual workshop)
- 12/2018 Science Teacher Association of Western Australia (STAWA) Future Science, Perth, Australia
- 11/2018 University of Western Australia, Perth, Australia
- 6/2018 Sandefjord Highschool, Sandefjord (joint workshop with Ellen Henriksen), Norway
- 11/2017 University of Bergen, Bergen, Norway (joint workshop with Carl Angell)
- 10/2017 Bro Aschehoug, Oslo, Norway

## Science Communication & Outreach Activities

- 2020-present **Podcast Contributor**, *Script writer and podcast guest for popular German physics podcast "Sag mal du als Physiker"*
- 8/2021 **Summer School Participant**, *Invited Participant at the International Summer School "Communicating Science", Wissenschaft im Dialog, the German organisation for science communication of the scientific community*
- 2018-2019 **Science Blogger**, *Blogger for Titan, the science magazine of the Faculty of Mathematics and Natural Sciences at the University of Oslo*
- 2016-2018 **Judge in Norwegian Youth Science Contests**, *Contests "Hvorfor det?" & "Unge Forskere"*

- 2013–2016 **Editor in Chief**, *Editor in chief of student physics magazine “Detektor”*, German Physical Society
- 9-12/2012 **Science Journalism Intern**, *Intern with German physics portal “Welt der Physik”*, Hamburg, Germany
- 2009–2012 **Physics Blogger**, *Blogger for the physics learning platform of the University of Göttingen*

## Selection of Invited Talks

- 08/2023 **Engasjerende fysikk - bruk av kropp og sanser for økt forståelse**, *Fysikermøte 2023*, Bergen, Norway  
(Key Note Talk)
- 11/2022 **Combining Design-Based Research and the Model of Educational Reconstruction in Astronomy Education**, *SHAW-IAU workshop 2023*, virtual talk
- 08/2022 **Einsteinsk fysikk i skolen**, *Landskonferansen om fysikkundervisning*, Trondheim, Norway
- 06/2022 **Round Table Discussion on Physics Education**, *EPS Forum*, Paris, France
- 10/2021 **On Four Different Senses of Embodiment in Science Education**, *Homi Bhabha Centre for Science Education*, virtual talk
- 06/2021 **Engaging the Public with Astrophysics Virtual Reality Experiences**, *IPTA Science Week*, the International Pulsar Timing Array, virtual talk
- 02/2020 **Impact in Einsteinian Physics Education**, *Inaugural Einstein-First International Workshop: Teaching Einsteinian Physics in Schools*, Perth, Australia  
(Key Note Talk)
- 11/2019 **Embodied Cognition in Science Education - Examples from Relativity**, *Karlstad University*, Karlstad, Sweden
- 11/2019 **Computer-Supported Collaborative Learning & Embodied Conceptions of Spacetime**, *Linköping University*, Norrköping, Sweden
- 7/2019 **Impact in Physics Education: the Transformational Power of Educational Research Collaborations**, *Institute of Physics*, London, UK
- 7/2019 **Bringing General Relativity to Secondary Schools: Design and Evaluation of a Digital Learning Environment**, *GR22-Amaldi13*, Valencia, Spain
- 2/2019 **Curved Spacetime: Investigating Students’ Conceptual Understanding in General Relativity**, *WE-Heraeus Seminar*, Bad Honnef, Germany
- 12/2016 **General Relativity: Making Einstein’s Theory Teachable**, *Future Science Conference*, Perth, Australia

## Selection of Publications

Download full list of publications: <https://www.magdalenakersting.com/publications/>

- 1 **Kersting, M., Amin, T. G., Euler, E., Gregorcic, B., Haglund, J., Hardahl, L. K., & Steier, R. (2023).**, *What Is the Role of the Body in Science Education? A Conversation Between Traditions, Science and Education*  
<https://doi.org/10.1007/s11191-023-00434-7>
- 2 **Kersting, M., Karlsen, S., Ødegaard, M., Olufsen, M., Kjærnsli, M., & Lunde, M. L. S. (2023).**, *Studying the quality of inquiry-based teaching in science classrooms*, International Journal of Science Education  
<https://doi.org/10.1080/09500693.2023.2213386>
- 3 **Kersting, M., Bondell, J., Steier, R., & Myers, M. (2023).**, *Virtual reality in astronomy education: Reflecting on design principles through a dialogue between researchers and practitioners.*, International Journal of Science Education, Part B  
<https://doi.org/10.1080/21548455.2023.2238871>
- 4) **Kersting, M., Schrocker, G., Papantoniou, S. (2021)**, *'I loved exploring a new dimension of reality' - a case study of middle-school girls encountering Einsteinian physics in the classroom*, International Journal of Science Education  
<https://doi.org/10.1080/09500693.2021.1950943>
- 5) **Kersting, M., Haglund, J., Steier, R. (2021)**, *A growing body of knowledge: On four different senses of embodiment in science education*, Science & Education  
<https://doi.org/10.1007/s11191-021-00232-z>
- 6) **Kersting, M., Blair, D. (Eds) (2021)**, *Teaching Einsteinian Physics in Schools: An Essential Guide for Teachers in Training and Practice*, Routledge, ISBN 9781760877712  
<https://bit.ly/3eRQnzR>
- 7) **Ødegaard, M., Kjærnsli, M., Kersting, M., (Eds) (2021)**, *Tettere på naturfag i klasserommet (Closer to science in the classroom)*, Fagbokforlaget, ISBN 9788245038439  
<https://www.fagbokforlaget.no/Tettere-p-naturfag-i-klasserommet/I9788245038439>
- 8) **Kersting, M., Steier, R., Venville, G. (2020)**, *Exploring participant engagement during an astrophysics virtual reality experience at a science festival*, International Journal of Science Education, Part B  
<https://doi.org/10.1080/21548455.2020.1857458>

- 9) **Steier, R., Kersting, M. (2019)**, *Metaimagining and embodied conceptions of spacetime*, *Cognition & Instruction*, 37:2, 145-168  
<https://doi.org/10.1080/07370008.2019.1580711>
- 10) **Kersting, M., Henriksen, E. K., Bøe, M. V., & Angell, C. (2018)**, *General relativity in upper secondary school: design and evaluation of an online learning environment using the model of educational reconstruction.*, *Physical Review Physics Education Research*, 14(1), 010130-1-010130-18  
<http://doi.org/10.1103/PhysRevPhysEducRes.14.010130>