# CURRICULUM VITAE

Full name and date

Name: Kotila, Jenni-Mari Sofia (She/Her)
ORCID: 0000-0001-9207-5824
Date of writing the CV: September 28, 2026

Education and degrees awarded

- Doctor of Philosophy, University of Jyväskylä, Finland (Major: Theoretical Physics), July 11, 2008, Jyväskylä (Contact information: Department of Physics, P.O. Box 35 (YFL), FI-40014 University of Jyväskylä, Finland, Tel: +358 40 805 4356)
- Master of Philosophy, University of Jyväskylä, Finland (Major: Theoretical Physics), March 26, 2003, Jyväskylä
- Bachelor of Science, University of Jyväskylä, Finland (Major: Physics), August 14, 2002, Jyväskylä
- Matriculation Examination, Vihannin Lukio 30.5.1998, Vihanti, Finland

Other education and training

- University of Gothenburg, Sweden, Introduction to Causal Inference (2,5cr) 2026
- Open University of the University of Jyväskylä, Finland: Statistics SPSS course (2cr) 2023; Introduction to Statistics (2cr) 2021
- University of Jyväskylä, Finland: Basics of project management 2023; Information security and data protection training 2022; University pedagogical studies I & II (10 +15cr) 2015-2016; Hyvis - student wellbeing adviser training 2015
- International Association for the Evaluation of Educational Achievement: Methods for Causal Inference with Observational Data from International Assessments 2025; IDB Analyzer GoToTraining 2020, 2021
- Collaborative Institutional Training Initiative (CITI PROGRAM): Physical Science Responsible Conduct of Research course 2016
- Nyyti ry – student life coach training 2016
- Yale University, USA: Scientific teaching fellows course 2014; Women in Science at Yale mentoring training 2013

Linguistic skills

- Finnish: native speaker
- English: fluent, second working language
- Swedish: basic working knowledge
- German: basics

Current position

- Senior Researcher 09/2023- University of Jyväskylä, Finland
- Senior Researcher 08/2023-08/2026, Centre International de Formation et de Recherche Avancées en Physique (CIFRA, UNESCO), Bukarest-Magurele, Romania

- Research Associate 10/2016-, Yale University, CT USA

Previous work experience

- University of Jyväskylä, Finland:
  - Academy Research Fellow 09/2018-08/2023
  - Project Researcher 01/2018-08/2018
  - Senior Researcher 09/2016-12/2017
  - Academy Postdoctoral Researcher 09/2013-08/2016
- Yale University, CT USA:
  - Postdoctoral Fellow, 09/2013-09/2016
  - Postdoctoral Associate, 10/2010-08/2013
- University of Jyväskylä, Finland:
  - Postdoctoral Researcher/Assistant 08/2008-12/2008
  - Researcher 04/2003-07/2008
  - Research assistant 01/2003-03/2003, 05/2002-07/2002
  - Trainee, 06/2001-09/2001
  - Part-time instructor: 2003, 2005, 2006

  Family leave: 09/2009-09/2010

Research funding, leadership, and collaboration

Principal investigator of following funded projects:

- 2018-2023 Academy Research Fellow grant, Funder: Academy of Finland 438 874 €
- 2021-2023 Academy Research Fellow: research costs, Funder: Academy of Finland, 159 969 €
- 2018-2022 Academy Research Fellow: research costs, Funder: Academy of Finland, 209 987 €
- 2013-2016 Postdoctoral Researcher grant, Funder: Academy of Finland 260 910 €
- 2016, 2012 Expense grant, Funder: The Väisälä Foundation 4000 €
- 2012 Expense grant, Funder: The Emil Aaltonen Foundation 5000 €
- 2004-2005 University of Jyväskylä, Rector's grant for researcher student, full-time position, Funder: University of Jyväskylä

Member of research team of following funded projects:

- 2025-2028 TIMSS 2027, National Research Coordinator, Funder: Ministry of Education and Culture, Finland
- 2023-2026 NEPTUN, named researcher in application, PI Jouni Suhonen, Funder: EU
- 2022-2027 PISA 2025, named researcher in application, PI Arto Ahonen, Funder: Ministry of Education and Culture, Finland
- 2022-2023 PARVI- Study of final assessment reform, named researcher in application, PI Juhani Rautopuro, Funder: Ministry of Education and Culture, Finland
- 2021-2025 TIMSS 2023, named researcher in application, PI Jouni Vettenranta, Funder: Ministry of Education and Culture, Finland
- 2018-2024 PISA 2022, PI Arto Ahonen, Funder: Ministry of Education and Culture, Finland

- 2018-2022 Academy Project, named researcher in application, PI Jouni Suhonen, Funder: Academy of Finland
- 2018-2020 eTIMSS 2019, PI Jouni Vettenranta, Funder: Ministry of Education and Culture, Finland
- 2018-2020 PISA 2018, PI Arto Ahonen, Funder: Ministry of Education and Culture, Finland
- 2010-2013 Nuclear Theory (Yale), PI Francesco Iachello, Funder: Department of Energy, USA

International collaboration:

- Cooperation with several international organizations, IEA, OECD, and institutions such as, MIT (USA), Yale (USA), INFN (ITA), TU Dresden (DEU), TU Darmstadt (DEU), UCL (GBR), TRIUMF (CAN), CIFRA (ROU)
- Collaboration member of NUMEN (https://web.infn.it/NUMEN/index.php/it/); ACCESS (https://sites.google.com/gssi.it/access); gA-EXPERT (https://indico.utef.cvut.cz/event/32/contributions/)

Supervision of students and postdoctoral researchers:

- Supervised graduate students: 2(pri) 3(sec), postdocds: 1, undergraduate students: 2
- Mentoring experience: Interdisciplinary mentor for graduate students 2013-, Interdisciplinary peer mentoring group adviser 2016-2018, University of Jyväskylä student wellbeing adviser (Staff members, who have been selected and trained to support the wellbeing of students) 2015-2017, Women in Science at Yale postdoc mentor 2013-2016

Publications

- Number of publications: 153
- Total number of citations: 4219 (Google Scholar), 2619 (Scopus), 2568 (Dimensions)
- Three most frequently cited publications:
  - Phase-space factors for double-beta decay, J. Kotila and F. Iachello, PRC85, 034316 (2012). Times Cited: Scopus 546, Google scholar 855
  - Nuclear matrix elements for double-beta decay, J. Barea, J. Kotila, and F. Iachello, PRC87, 014315 (2013). Times Cited: Scopus 346, Google scholar 522
  - $0\nu\beta\beta$ and $2\nu\beta\beta$ nuclear matrix elements in the interacting boson model with isospin restoration, J. Barea, J. Kotila, and F. Iachello, PRC91, 034304 (2015). Times Cited: Scopus 342, Google scholar 497

Phd thesis supervised:

- Aagrah Agnihotri, Study of Nuclear Weak Processes for Physics Beyond the Standard Model (2026), University of Jyväskylä, Finland
- Elina Kauppinen, "Nuclear-structure calculations of double beta decay and giant resonances (2025), University of Jyväskylä, Finland

Phd thesis reviewed:

- Beatriz Romeo Zaragozano, Toward reliable 0νββ-decay nuclear matrix elements: exploring the potential of measuring γγ-transitions (2024), Universitat de Valencia, Spain; member of the examination panel
- Aysegül Ertopak, Experimental Studies of the Neutron Deficient Atomic Nuclei $^{94}$Ru, $^{95}$Rh and $^{172}$Pt via their Electromagnetic Properties (2020), KTH Royal Institute of Technology, Sweden; member of evaluation committee
- Ruslan Magana Vsevolodovna, Transfer Reactions, Neutrinoless double beta decay and Double Charge Exchange (2018), Universitá Degli Studi di Genova, Italy; external referee

Peer-reviewing activities:

- Funding applications: National Science Centre Poland 2024, Poland; Czech Science Foundation 2023, Czech Republic; Regular FONDECYT National Projects Competition 2021, Chile
- Scientific publications: Physical Review Letters, Physical Review D, Physical Review C, Physica Scripta, Journal of Physics G: Nuclear and Particle Physics, Nuclear Physics and Atomic Energy, Advances in High Energy Physics, Frontiers, Morressier, Universe, Brazilian Journal of Physics, Yhteiskuntapolitiikka, Environmental Sciences Europe

Teaching experience:

- 2003-2008, 2014-2017 Instructor of several undergraduate and graduate courses such as Flying start in Physics (2cr); Derivatives and Integrals (3cr); Thermodynamics and optics (5cr); Modern Physics (5cr); Mechanics (5cr); Electricity (5cr); Electromagnetism (5cr); Introductory Physics I (9cr); Introductory Physics II (11cr); Nuclear Physics II (9cr)

Other academic merits

- Organization of international conferences
  - 14th International Spring Seminar on Nuclear Physics: Cutting-edge developments in nuclear structure physics (SPRING 2025) Ischia, Italy 19-23.5 2025: Member of international advisory committee
  - XXXI International Conference on Neutrino Physics and Astrophysics (Neutrino 2024), Milan, Italy 16-22.6 2024.Neutrino 2024: Member of international advisory committee, Poster award contest judge
  - 20th International Conference on Hadron Spectroscopy and Structure (HADRON 2023), Genova, Italy 6-9.6.2023: Session convener: Hadrons and physics Beyond the standard model; member of "Young Researcher Award" evaluation panel
  - International Nuclear Physics Conference (INPC 2022), Cape Town, South Africa 11-16.2022: Session convener: Science education and outreach
  - Neutrinos and Dark Matter (NDM 2015), Jyväskylä, Finland 1-6.6 2015: Member of local organizing committee
- External science expert in projects: OECD: AI and the Future of Skills (AIFS) 2024; Educluster Finland high school final examination 2020-2022; LUMA2020 2019-2020

- Memberships in Professional Societies: Finnish Educational Research Association, FIN; European Science Education Research Association (ESERA); European Physical Society; Finnish Physical Society, FIN; National Postdoctoral Association, USA; Women In Science At Yale, USA; Finnish Association for Mathematicians, Physicists, and Computer Scientists, FIN; Academic Engineers and Architects in Finland, FIN

Scientific and societal impact of research

Promoting open science and research, research communication:

- Founding member of ESERA SIG: LASSIE
- Creator of webpage: nuclear theory.yale.edu
- Figure preparation and pre-editorial work on assembling second edition of the book: Lie Algebras and Applications by Francesco Iachello (2014).
- Part of organizing committee of the open house events ILLUMINATE JYFL 9/2014, Researchers' night (JYFL) 9/2016; 9/2017; 9/2026

Other merits

Fundraising, organization of events

- Member of advisory and fundraising committee: KOVA Kortepohja school, Jyväskylä Finland 2018-2022, United community nursery school, New Haven, CT, USA, 2013-2014
- Association work: Jyväskylän Naisvoimistelijat JNV (aesthetic group gymnastic club); Crohn and Colitis ry Finland