

Curriculum Vitae

1. Personal details

Full name: Lantto, Perttu Olavi
Researcher ID: F-4591-2014
Orcid ID: 0000-0003-0685-7657
Year of birth: 1975
Nationality: Finnish
Gender: Male
Web page: http://cc.oulu.fi/~nmrwww/members/Perttu_Lantto.html



2. Education and degrees completed

- **Docent** (adjunct professorship) **1.4.2008** in **Computational Molecular and Materials Physics**, Dept. of Physics (DoP), University of Oulu, Finland
- **Ph.D.** in physics, **20.12.2002**, DoP, UO
- **M.Sc.** in physics, **23.9.1998**, DoP, UO

3. Current position

- **Permanent University Researcher** position, 1.12.2018 onwards, working in **NMR Research Unit (NMRU)**, <http://cc.oulu.fi/~nmrwww/>, UO. **Tasks:** running own research group, doing research and teaching, applying funding, supervising own students, participating project management and administration

4. Previous professional experience

- **5-year University Researcher** position, 1.12.2013 – 30.11.2018
- **Academy Research Fellow (ARF) of Academy of Finland (AoF)**, 1.8.2007 – 9.12.2013, NMRU, UO (2008: 15 positions, 164 applicants)
- Lab. of Physical Chemistry, Dept. of Chemistry, University of Helsinki (UH):
 - 3-year post-doc position of UH (2007: 12 positions, 252 applicants): 1.1-2007– 31.7.2008, voluntary leave of absence 1.8.2007– 31.7.2008, resigned 1.1.2008 due to ARF position at UO
 - post-doc position, 1.1 – 31.1.2006
- NMRU, Dept. of Physics, UO
 - Senior assistant, 1.8. – 31.12.2005, 6.2. – 31.7.2004
 - Assistant, 1.8.2004 – 31.7.2005
 - Part-time (27%) researcher, 1.5.2003 – 31.1.2004
 - 2 x 3-year assistantships, 1.8.1999 – 31.7.2005 (voluntary leave of absence: 1.8.1999 – 31.7.2004)
- Lab. for Instruction in Swedish, Dept. Chemistry, UH
 - Researcher, 1. – 31.1.2002
- Visiting scientist with Dr. Martin Kaupp in the Dept. of Michele Parrinello, Max Planck Institute for Solid State Research, Stuttgart, Germany, 20.9. – 19.11.1999
- In NMRU, Dept. of Physics, UO
 - Graduate student with grants from several foundations, 1.4.1999 – 31.12.2002
 - Researcher, 1.1 – 31.3.1999
 - Assistant, 1.8. – 31.12.1998
 - Research assistant, 1.6. – 31.7.1998, 1. – 31.3.1998, 1.6. – 31.8.1997, 1.6. – 31.8.1996

5. Career breaks

- Paternity leave (16. – 20.5, 24.–27.6., 7. – 10.6, 26.6 – 1.7.2011), parental leave (29.7. – 8.8.2011, 1.1 – 1.3.2012), altogether *ca.* 4 months
- Finnish national defense service as non-military service (13 months, 7.1.2003 – 5.2.2004): training period in Lapinjärvi training centre (7.1. – 2.2.2003), service in Computational Chemistry group of Prof. Kari Laasonen (3.2.2003 – 5.2.2004), Dept. of Chemistry, UO

6. Personal funding and grants

- **Project funding from AoF (#285666)**, 1.9.2015 – 31.8.2019: **517 869 €** (70% of the total: **739816 €**)
- **ARF project of AoF (#119793)** 1.8.2008 – 9.12.2013: **539 112 €** (100% of total costs, #125316: 195 870 €, #218191: 238 771€, #255641: 104 471€), 1.8.2007 – 31.7.2008: **70950 €** (100% of total costs)
- **Responsible representative of UO** (2016 onwards), participated in the planning and application processes of high-throughput PC/Linux computing clusters for grid and cloud computing, funding from AoF and UO: 1st gen. 2004, Brutus (Oulu node of MGRID): **64000 €**, 2nd gen. 2008, Jovian: (Oulu node of MGRID):

80000 €, 3rd gen. 2011, Taygeta (Oulu node of FGI-FIRI): **120000 €**, 4th gen., 2015, Carpo (Oulu node in FGI-FIRI): **114000 €** (total budget *ca.* **3 M€**), 5th gen. granted for 2018-19, Oulu node in FGI2-FIRI: **286000 €** (total budget *ca.* **2.8M€**)

- **Funding** from Oulu Mining school (OMS) for **REE-project: 37000 €** (2013-14), **39500 €** (2015-16)
- **Four** full-year PhD scholarships from Finnish Cultural (1999: **13300 €**, 2001: **13300 €**), Alfred Kordelin (1999: **12500 €**) and Magnus Ehrnrooth (2000: **12000 €**) foundations for own PhD studies
- Several smaller personal scholarships altogether *ca.* **21400 €** from North Ostrobothnia Regional Fund of FCF, Emil Aaltonen Fund, Tauno Tönning and Oskar Öflunds Foundations, Vilho, Yrjö and Kalle Väisälä Fund of Finnish Academy of Science and Letters
- **Principal Investigator (PI) in NMRU, UO**
 - **Strategic research project of Kvantum Institute of UO: “Frontiers of Materials NMR”**, 2017-20, 4-year funding for a PhD student starting 1.10.2018
 - **Academy project:** “Magneto-Optic and Magnetic Resonance Modelling in Extended Systems: MOMRMES”, 2015 –19, salaries of several MSc and PhD students as well as post-docs
 - **ARF project** “Dynamic NMR modeling”, 2007–13, own and PhD students’ salaries
 - **Actively applying funding** as PI (4 AoF project applications; 2/2 ERC Starting/Consolidator Grant applications; several private foundation applications), collaborating in several experimental and computational projects with other PIs of NMRU (participated in several AoF/ERC applications) and international collaboration with researcher in LTU, Sweden, and helped graduate students to successfully apply funds as well as National Graduate School positions (LasKeMo and NGS-NANO)

7. Leadership and supervision experience

- **Leading and planning own computational NMR research in NMRU since the ARF funding**
- **Supervisor of post-doc researchers:** Dr. Jarkko Vähäkangas (2015–16), Dr. Juho Roukala (2017), Dr. Jiří Mareš (2017-19), Dr. Sanna Komulainen (2016-)
- **Supervised 5 completed PhD theses in NMRU: principal supervisor for 2:** Juho Roukala (Nov 2016), Vasantha Gowda (Dec 2017, double-degree with Luleå Technical University, Sweden) and **assisting supervisor for 3:** Matti Hanni (Jun 2011), Teemu S. Pennanen (Dec 2011), Jarkko Vähäkangas (Aug 2015)
- **Currently supervising 4 PhD theses in NMRU: principal for 2:** Jouni Karjalainen, Petri Peuravaara (KVANTUM), **assisting for 2:** Marcin Selent, Roya Khalili (14FUTURE)
- **Supervised and reviewed 10 MSc and 6 BSc theses 2009-19 at UO and UH**
- **Reviewed other MSc theses :** Helmi Liimatainen 2009 UH, Jouni Karjalainen 2009 UO, Akseli Mansikkamäki 2013 UJ, Nuha Abuzaid 2017 UO, Tuukka Mankinen 2017 UO

8. Teaching merits and experience

- Responsible (lecturing, exercise planning, examinations) of several **Basic, Intermediate and Advanced** courses in physics and chemistry curricula at UO, *advanced course in English: Computational Physics and Chemistry (A 6 ECTS points 2005, 2010, 2012; 5p 2019-), Molecular Quantum Mechanics (A 5p 2018,2020), Thermophysics (I 7p 2017-18, 5p 2019-), Mechanics, part 2 (B 3p 2016-17), Physical Chemistry II (I 4p spring 2015, 5p fall 2015), B.Sc. Thesis and Seminar (I 10p, 2011)*
- Exercise assistant: *Molecular Physics (A 8p 2011), Molecular Properties (A 6p 2010, 2014), Electromagnetism I (I 6p 2005), Mechanics (I 6p 2005), Atomic and Nuclear Physics (B 3p 2005), Mathematics for Physics (B 6p 2004), Electromagnetism II (I 6p 2004), Thermophysics (I 6p 1998)*
- Teacher in the International Master’s Degree Programme in Magnetic Resonance in Materials (MRM), Dept. of Physics, UO, 2011-14, all teaching and supervision *in English*
- Supervised several students in research work and reporting in the *advanced* courses: *Introduction to experimental physical research (6p)* and *Research project in physics (6p)*

11. Other key scientific and academic merits

- **Coordinator of Finnish Grid and Cloud Infrastructure (FGCI)** in University of Oulu
- **Expert statement for a Docentship:** Markus Kaukonen (2016, UH)
- **Opponent of PhD thesis:** Chandan Kumar, 29.11.2019, University of Oslo, Norway
- **Pre-reviewer of PhD theses** Ying-Chan Lin 2008, Teemu O. Pennanen 2010, and Cong Wang 2009 at UH
- Member (14 mos.) and vice-member (22 mos.) of the Council of the Dept. of Physics, UO, 2000 – 02
- Member of the expert committee for Professorship in theoretical physics at the Dept. of Phys., UO, 2001
- Member of organizing and scientific committee of Finnish NMR Symposiums, 2014, 2019, ~100 participants
- Head and member of about 10 UO graduate school (UniOGS) students’ follow-up groups
- Reviewer in several distinguished scientific journals, *e.g. PRL, PRB, PCCP, JCP*