

# Curriculum Vitae

## doc. Mgr. Ladislav Mišta, Ph.D.

### 1. Personal Details

Name: Ladislav Mišta

Date of birth: 15.5. 1972

Marital status: married

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### 2. Qualifications and Career History

**January 2016** habilitation in optics and optoelectronics, Department of Optics, Faculty of Natural Sciences, Palacký University, Olomouc, Czech Republic, doc. (an equivalent of Associate Professor).

**2003-now** senior researcher at the Department of Optics, Faculty of Natural Sciences, Palacký University, Olomouc, Czech Republic.

**June 2003** Ph.D. degree, Department of Optics, Faculty of Natural Sciences, Palacký University, Olomouc, Czech Republic.

**1995-2000** postgraduate studies, Department of Optics, Faculty of Natural Sciences, Palacký University, Olomouc, Czech Republic, supervised by prof. Jan Perina. (October 1997-March 1999-studies interrupted due to the community service.)

**1990-1995** university studies, 1990-1993-theoretical physics, Faculty of Mathematics and Physics, Charles University, Prague, Czech Republic; 1993-1995-Department of Optics, Faculty of Natural Sciences, Palacký University, Olomouc, Czech Republic, Mgr. (an equivalent of Master of Sciences).

**2007** March-August (6 months), Research Fellow at the group of dr. N. Korolkova, School of Physics and Astronomy, University of St. Andrews, St. Andrews, Scotland, UK.

**2010** May-November (7 months), Research Fellow at the group of dr. N. Korolkova, School of Physics and Astronomy, University of St. Andrews, St. Andrews, Scotland, UK.

### 3. Teaching activities

**Lectures (compulsory):**

Selected parts from mathematical analysis (OPT/VKMN), summer semester, 4 hours lecture +2 hours tutorials per week, 2008-now.

**Lectures (optional):**

Quantum communication and information processing III (OPT/KK3), winter semester, 2 hours per week, 2011.

Selected parts from quantum mechanics (OPT/VPKM), summer semester, 2 hours per week, 2003-2006, 2016.

**Tutorials:**

Tutorials on mechanics and acoustics (OPT/MA), 2 hours per week, 2002-now.

**Student supervision:**

Bachelor student:

1. D. Koutný, bachelor thesis, title: “Nonlocalizable genuine multipartite entanglement” (defended in August 2015).

Postdoctoral student:

MSc. Daniel McNulty, Ph.D., project POST UP II CZ.1.07/2.3.00/30.0041, 2 publications:

1. D. McNulty, R. Tatham, and L. Mišta, Jr., *Nonexistence of entangled continuous-variable Werner states with positive partial transpose*, Phys. Rev. A **89**, 032315 (2014).

2. L. Mišta, Jr., D. McNulty, and G. Adesso, *No-activation theorem for Gaussian nonclassical correlations by Gaussian operations*, Phys. Rev. A **90**, 022328 (2014).

#### 4. Research Activities

Quantum measurement, quantum entanglement, quantum teleportation, non-classical states, Gaussian and non-Gaussian quantum states, Gaussian and non-Gaussian bipartite entanglement and more generic quantum correlations, Gaussian entanglement measures and Gaussian multipartite entanglement.

#### 5. Projects

**Principal investigator:**

Research project “Complex quantum correlations and their applications,” GAČR P205/12/0694, 2012-2014 (outstanding assessment).

**Member of the research team:**

Research projects MŠMT ČR LN00A015 and CEZ:J14/98, project “Measurement and information in optics, ” (MSM 6198959213), Czech-Japanese project ME10156 (MIQIP) and project EU FET-Open grant COMPAS, No. 212008.

#### 6. Conferences

I have presented my scientific results as an invited talk, contributed talk or poster at 40 international or local conferences.

**List of invited talks:**

1. 11th QuiSco meeting, 9.11. 2010, Computer Science Department, University of Glasgow, Scotland, UK.
2. IV Quantum Information Workshop Paraty 2013, 12. 8. - 16. 8. 2013.
3. Macroscopic Quantum Coherence 2015, 1. 6. - 3. 6. 2015, University of St. Andrews, Scotland, UK.
4. Quantum Limits on Information Processing (QLIPS), 4. 3.- 10. 3. 2016, Nanyang Technological University, Singapore.
5. Continuous variable quantum information theory and applications, 5. 6. 2017, School of Mathematical Sciences, University of Nottingham, UK.

**7. Publications**

46 original scientific publications in international impacted journals including 6 publications in Physical Review Letters and 29 publications in Physical Review A.

**Sum of times cited without self-citations:** 489.

**h-index:** 15.