# omid charrakh Resume

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Date of Birth 16.07.1990

Nationality Iranian



Education		
2017-Present	PhD in Philosophy of Physics	LMU Munich
	▶ Thesis title: Quantum Entanglement: Relativity and Causality	
	▶ Supervisor: Stephan Hartmann	
2012-2016	MSc in Physics	LMU Munich
	Thesis title: On the Reality of the Wavefunction (with distinction)	
	▶ Supervisor: Stephan Hartmann	
2007-2012	BSc in Electrical Engineering	Amirkabir University of
		Technology-Tehran, Iran
	Thesis title: Thermal and Quantum Noises in High Frequency Devices (with distinction)	
	<b>▶</b> Supervisor: Abdolali Abdipour	

#### **Research Interests**

- Philosophy of Physics: Foundations of Quantum Mechanics, Relativity, Arrow of Time
- Philosophy of Science: Metaphysics of Causation, Laws of Nature, Bayesian Epistemology

# **Academic Prizes and Scholarships**

- Starting from October 2018: Studienstiftung des deutschen Volkes
  Doctoral scholarship from the German Academic Scholarship Foundation.
- December 2017: The Hanneke Janssen Memorial Prize
  International award for the best Master's thesis in the field of History and Philosophy of Physics.
- August 2017: Quantum Networks
  Financial award for attending and presenting a poster in the University of Oxford.
- April 2017-September 2018: MCMP Scholarship Scholarship for starting PhD studies.
- October 2007: Prize for Exceptional Talents Awarded to the top 0.1% students in Iranian University Entrance Exam (Concours).

#### **Publications**

1. "On the Reality of the Wavefunction"; To be submitted to Studies in History and Philosophy of Science.

### **Presentations**

- 1. **Talk:** On the Reality of the Wavefunction, *Foundations of Quantum Mechanics and Quantum Information Theory, Munich–June 2018.*
- 2. **Talk:** On the Reality of the Wavefunction, *Radboud University, Nijmegen–December 2017.*
- 3. Poster: On the Reality of the Wavefunction, Solstice of Foundations, ETH Zurich-June 2017.
- 4. Talk: On the Reality of the Quantum State, QCQMB, Prague-June 2017.
- 5. Talk: On the Problem of the PBR No-Go Theorem. MCMP, Munich-December 2016.

#### **Seminars and Schools**

- 1. The Chimera of Entropy, Summer School in Philosophy of Physics, Split, Croatia-July 2018.
- 2. Space, Time, and Matter, Summer School in Philosophy of Physics, Black Forest, Germany-July 2017.

# **Reviewing service**

- 1. First Irvine-Munich-PoliMi-Salzburg Conference in Philosophy and Foundations of Physics (IMPS 2018)
- 2. International Studies in the Philosophy of Science (ISPS)

# **Teaching Experience**

- SS 2018: Teaching Assistant (Tutor) of **Foundations of Quantum Mechanics and Quantum Information Theory** given by Prof. Hartmann.
- SS 2017: Teaching Assistant (Tutor) of **Theoretical Mechanics = T1**, and **Experimental Thermodynamics = E2** given by Prof. Schollwoeck, and Prof. Kersting.
- SS 2016: Teaching Assistant for **Theoretical Electrodynamics = T3**, and **Experimental Thermodynamics = E2** given by Prof. Hoffman, and Prof. Braun.
- WS 2015: Teaching Assistant for Experimental Mechanics = E1, Computational Physics = T0 and Crash Course in Mathematics given by Prof. Üdem, Prof. Delft, and Dr. Emmer.
- SS 2015: Teaching Assistant for Experimental Thermodynamics = E2 given by Prof. Kersting.
- WS 2014: Teaching Assistant for Computational Physics = TO, "Experimental Mechanics = E1, and Theoretical Quantum Mechanics = T2 given by Prof. Delft, Prof. Gaub, and Prof. Scirinzi.
- SS 2014: Teaching Assistant for **Theoretical Mechanics = T1p**, and **Experimental Thermodynamics = E2** given by Prof. Buchalla, and Prof. Kersting.
- WS 2012: Teaching Assistant for Theoretical Statistical Mechanics = T4 given by Prof. Sachs.

### **Work Experience**

- Oct 2016-Mar 2017: Academic Assistant (HiWi) for Prof. Stephan Hartmann, at MCMP, in Munich.
- Jul 2014–Sep 2015: Cook of Olympiadorf Bierstube, in Munich.
- Oct 2008–Jun 2009: Designer of Electronic Circuits for a robotics group, in Tehran-Iran.
- Oct 2007–Sep 2008: Salesman at a bookstore, in Tehran-Iran.

### **Languages and Certifications**

- Languages:
  - 1. Persian (Native)
  - 2. English (Fluent)
  - 3. **German** (Elementary)
  - 4. **Arabic** (Elementary)
- Academic Certifications:
  - 1. IELTS
  - 2. GRE Physics Test

#### IT Skills

- MATLAB & Programming: C++ and QBASIC, Simulink, Symbolic Math toolbox, and PDE toolbox.
- Engineering Software: PSPICE, HSPICE, Maple, Xilinx, ADS, Stata, SPSS.