



Martin Venhart

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né: January 8, 1981

Mgr. Martin Venhart, PhD.

Education

2004–2008, Comenius University Bratislava

PhD. Experimental nuclear physics

1999–2004, Comenius University Bratislava

Mgr. (MSc. equivalent), Nuclear and subnuclear physics

Academic positions held

06/2017 →, Presidium of Slovak Academy of Sciences

Member of Presidium

09/2013 →, Institute of Physics, Slovak Academy of Sciences

Head of Department of Nuclear Physics

09/2010–08/2013, Institute of Physics, Slovak Academy of Sciences

Research scientist

08/2008–07/2010, Instituut voor Kern-en Stralingsfysica, KU Leuven (Belgium)

Post-doctoral researcher

Professional interests

Spectroscopy of conversion electrons and γ rays

Nuclear structure, shape coexistence in atomic nuclei

High-vacuum tape transportation systems

Inelastic particle scattering techniques for nuclear structure

GEANT4 simulations

Science-to-public activities

Membership in committees

2015–2018, Scientific council of Institute of Physics, Slovak Academy of Sciences

2017 →, Scientific council of Slovak Academy of Sciences

2018 →, Scientific council of Faculty of Material Science and Technology, Slovak University of Technology

2018 →, Scientific council of Advanced Technologies Research Institute

2013 →, Advisory board for collaboration of Slovakia with CERN
secretary, representative for non-LHC experiments

2016 →, ISOLDE collaboration committee (CERN)
representative of Slovak Republic

2019 →, Nuclear Physics European Collaboration Committee
representative of Institute of Physics

Publications

Author or co-author of 65 original articles in refereed journals
Hirsch index = 21

Refereeing duties

European Physics Journal A

International collaboration (formal)

CERN

iThemba Labs, Cape Town, South Africa

International collaboration (informal)

University of Jyväskylä, Finland

University of Liverpool, United Kingdom

Spokesperson of experiments and collaborations

IS521: ISOLDE facility, CERN

S17: University of Jyväskylä, Finland

JR115: University of Jyväskylä, Finland

PR235: iThemba Labs, South Africa

Major achievements

Leader of negotiations on joining the ISOLDE collaboration

Full membership of Slovak Republic since 2016

IS521: first experiment at CERN led by Slovakia

First successful measurements in 2014 and 2016

Development of unique TATRA spectrometer used at CERN

High-resolution detection system for conversion electrons

Start of the Tandetron Laboratory in Piešťany (Slovakia)

Leader of program, first beam in September 2016

Co-author of study of K isomer in ^{254}No

published in Nature (responsible for the data analysis)

Grants and projects

2012 – 2015, Energy of symmetry in structure of nuclear matter

Slovak Research and Development Agency, 203 750 €

Principal investigator

2016 – 2020, Structure of atomic nuclei

Slovak Research and Development Agency, 250 000 €

Principal investigator

2014 – 2015, Research Center ALLEGRO

Structural funds of EU, 16 214 711 €

Investigator

2012 – 2015, Completion of infrastructure IP SAS in research and diagnostic of nanoparticles, nanomaterials and materials using methods of nuclear physics

Structural funds of EU, 2 997 825 €

Investigator

2011 – 2015, PVC HAJE - Industrial Research Centre of the safety risks of accidents with loss of coolant in nuclear power plants

Structural funds of EU, 3 328 352 €

Investigator

2014 – 2016, Shape coexistence in heavy nuclei

Slovak funding agency VEGA, 21 000 €

Principal investigator

Supervision of students

PhD. students, Institute of Physics, Slovak Academy of Sciences

2014 → Robert Urban

2015 → Matúš Sedlák

2016 → Matúš Balogh

2017 → Jakub Krajňák

2018 → Gulnur Kantay

PhD. students, University of Liverpool (co-supervision)

2012 – 2015 Fuad A. Ali

2013 – 2017 Fay Wearing

Master students, Faculty of Mathematics, Physics and Informatics, Comenius University Bratislava

2015 – 2017 Jakub Krajňák

2014 – 2016 Matúš Balogh

2017 – 2019 Andrej Špaček

2018 → Natália Džalaiová

Master students, Instituut voor Kern-en Stralingsfysica, KU Leuven

2009 – 2010 Marijke Keupers

Bachelor students, Faculty of Mathematics, Physics and Informatics, Comenius University Bratislava

2012 – 2014 Matúš Balogh

2013 – 2015 Jakub Krajňák

2013 – 2016 Lukáš Holub

2015 – 2017 Andrej Špaček

2016 – 2017 Jakub Lietavec

2015 – 2019 Monika Bírová

2019 → Erika Jajčišínová

Supervision of post-docs

Institute of Physics, Slovak Academy of Sciences

2015 – 2018 Pareshkumar Prajapati (SASPRO - Mobility Programme of the Slovak Academy of Sciences)

2018 → Andrej Herzán

Conferences organised (as chairman)

ISTROS 2013, 2015, 2017, and 2019

Častá-Papiernička, Slovakia

AWG 2011, and SWG 2015 - GEANT4 summer schools

Častá-Papiernička, Slovakia

SWG 2013 - GEANT4 summer school

Somerset West, Cape Town, South Africa

Science-to-public activities

Conference Young Hope of Slovak Science

Annually approximately 15 popular talks on various forums in Slovakia

Participant of Roadshow of Young Scientists in High Schools