

People who obtained degrees and awards in LPD

(list is not full: information is still to be added for V. Morozov, O. Solovei, V.A. Yatsenko, S. Gudkov, K.G. Kladko, V. Kornaga, and others)

Bachelor of Science (B.Sc.)

- 1979: F.A. Danevich (Taras Shevchenko Kyiv State University, Kyiv, Ukraine/USSR)
B.Sc. in Physics
Thesis title: "Pulse-shape identification between beta particles (gamma quanta) and neutrons in liquid scintillators"
Supervisor: Yu.G. Zdesenko
- 1983: V.V. Vasilenko (Taras Shevchenko Kyiv State University, Kyiv, Ukraine/USSR)
B.Sc. in Physics
Thesis title: "Stabilization of data acquisition system of low background scintillation detector"
Supervisor: Yu.G. Zdesenko
- 1985: O.A. Bezshyyko (Taras Shevchenko Kyiv State University, Kyiv, Ukraine/USSR)
B.Sc. in Physics
Thesis title: "Investigation of light yields in CdWO₄ crystal scintillators"
Supervisor: Yu.G. Zdesenko
- 2001: S.S. Nagorny (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
B.Sc. in Physics
Thesis title: ""
Supervisor: Yu.G. Zdesenko
- 2003: D.V. Poda (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
B.Sc. in Physics
Thesis title: "Search for α activity of ²⁰⁹Bi with the help of bismuth germanate crystals"
Supervisor: F.A. Danevich
- 2003: S.S. Yurchenko (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
B.Sc. in Physics
Thesis title: "Pulse-shape identification of scintillation signals by using methods of artificial neural networks"
Supervisor: F.A. Danevich
- 2004: V.O. Kulagin (National Technical University of Ukraine "Kyiv Polytechnic Institute", Kyiv, Ukraine)
B.Sc. in Applied Physics
Thesis title: "Optimization of light collection in large-scale experiment to search for double beta decay of ¹¹⁶Cd (project "CAMEO")"
Supervisor: F.A. Danevich
- 2006: Yu.M. Checherenko (National Technical University of Ukraine "Kyiv Polytechnic Institute", Kyiv, Ukraine)
B.Sc. in Technique
Thesis title: "Electronics for slow scintillation signals processing in low counting experiments"
Supervisor: F.A. Danevich
- 2009: D.M. Chernyak (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
B.Sc. in Physics
Thesis title: "Development of the low-background scintillating detector with CaMoO₄ crystal scintillators to search for neutrinoless double beta decay of ¹⁰⁰Mo"
Supervisor: F.A. Danevich

- 2011: R.O. Yakobchuk (National Technical University of Ukraine “Kyiv Polytechnic Institute”, Kyiv, Ukraine)
B.Sc. in Applied Physics
Thesis title: “Investigation of rare nuclear decays”
Supervisor: V.I. Tretyak
- 2011: V.V. Isaienko (National University “Kyiv-Mohyla Academy”, Kyiv, Ukraine)
B.Sc. in Physics
Thesis title: “Development of experimental techniques for the study of double beta decay”
Supervisor: F.A. Danevich
- 2012: D.O. Dzubenko (National University “Kyiv-Mohyla Academy”, Kyiv, Ukraine)
B.Sc. in Physics
Thesis title: “Development of experimental techniques and data analysis for double beta decay experiments”
Supervisor: F.A. Danevich
- 2013: A.S. Zolotaryova (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
B.Sc. in Physics
Thesis title: “Low temperature detectors to investigate double beta decay”
Supervisor: F.A. Danevich
- 2014: R.V. Kobychhev (National Technical University of Ukraine “Kyiv Polytechnic Institute”, Kyiv, Ukraine)
B.Sc. in Computer Science
Thesis title: “Experimental investigations and computer simulation of response of CdWO₄ scintillating detectors”
Supervisor: F.A. Danevich
- 2015: O.A. Kot (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
B.Sc. in Physics
Thesis title: “Low-background scintillation detector for studies of rare nuclear processes”
Supervisor: F.A. Danevich
- 2015: V.O. Kabanova (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
B.Sc. in Physics
Thesis title: “Investigation of decay scheme of isomeric state of ^{113m}Cd”
Supervisor: F.A. Danevich
- 2016: M.M. Nikolaichuk (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
B.Sc. in Physics
Thesis title: “Estimation of possibilities to search for axions that can be emitted by nuclear reactors and radioactive sources”
Supervisor: V.V. Kobychhev
- 2017: N.V. Sokur (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
B.Sc. in Physics
Thesis title: “Reducing of background for scintillation detectors”.
Supervisor: F.A. Danevich
- 2017: M.M. Zarytsky (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
B.Sc. in Physics
Thesis title: “Search for double beta decay of ¹⁰⁶Cd”.
Supervisor: F.A. Danevich

Master of Science (M.Sc.)

- 1977: B.N. Kropyviansky (Taras Shevchenko State University, Kyiv, Ukraine/USSR)
M.Sc. in Nuclear and Particle Physics
Thesis title: “Neutron-activation analysis of natural samples with application of semiconductor detectors and computers”
Supervisor: Yu.G. Zdesenko
- 1977: V.N. Kuts (Taras Shevchenko State University, Kyiv, Ukraine/USSR)

- M.Sc. in Nuclear and Particle Physics
Thesis title: “Possibilities of application of high resolution semiconductor detectors for express roentgen-fluorescence elemental analysis of samples of rocks”
Supervisor: Yu.G. Zdesenko
- 1979: O.G. Gudnova (Taras Shevchenko State University, Kyiv, Ukraine/USSR)
M.Sc. in Nuclear and Particle Physics
Thesis title: “Prototype of multiwire proportional chamber for set-up to study double beta decay”
Supervisor: Yu.G. Zdesenko
- 1980: F.A. Danevich (Taras Shevchenko State University, Kyiv, Ukraine/USSR)
M.Sc. in Nuclear and Particle Physics
Thesis title: “Investigation of possibilities of application of liquid scintillators for studies of double beta decay”
Supervisor: Yu.G. Zdesenko
- 1981: V.P. Sopronyuk (Taras Shevchenko State University, Kyiv, Ukraine/USSR)
M.Sc. in Nuclear and Particle Physics
Thesis title: “Studies of double beta decay of ^{96}Zr ”
Supervisor: Yu.G. Zdesenko
- 1984: V.V. Vasilenko (Taras Shevchenko State University, Kyiv, Ukraine/USSR)
M.Sc. in Nuclear and Particle Physics
Thesis title: “ CdWO_4 scintillators for investigation of 2β decay of ^{116}Cd ”
Supervisor: Yu.G. Zdesenko
- 1986: I. Zaets (Taras Shevchenko State University, Kyiv, Ukraine/USSR)
M.Sc. in Nuclear and Particle Physics
Thesis title: “Simulation of 2β decay of ^{100}Mo with semiconductor Si(Li) detectors”
Supervisor: Yu.G. Zdesenko
- 2002: S.S. Nagorny (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
M.Sc. in Nuclear and Particle Physics
Thesis title: “Study of properties of cadmium, calcium, zinc and lead tungstate crystal scintillators to search for dark matter, processes of alpha decay and double beta decay of atomic nuclei”
Supervisors: Yu.G. Zdesenko, F.A. Danevich
- 2004: D.V. Poda (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
M.Sc. in Nuclear and Particle Physics
Thesis title: “Optimization of detector based on cadmium tungstate crystal scintillator”
Supervisor: F.A. Danevich
- 2004: S.S. Yurchenko (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
M.Sc. in Nuclear and Particle Physics
Thesis title: “Application of artificial neural networks to pulse-shape analysis of cadmium tungstate scintillation signals”
Supervisor: F.A. Danevich
- 2007: V.M. Mokina (National Technical University of Ukraine “Kyiv Polytechnic Institute”, Kyiv, Ukraine)
M.Sc. in Physics
Thesis title: “Development of scintillation detectors with high energy resolution for the experiment to search for 2β decay of atomic nuclei (project SuperNEMO)”
Supervisor: F.A. Danevich
- 2011: D.M. Chernyak (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
M.Sc. in Nuclear and Particle Physics
Thesis title: “Low-background detector with $^{116}\text{CdWO}_4$ crystal scintillators to search for 2β decay of ^{116}Cd ”
Supervisor: F.A. Danevich
- 2015: A.S. Zolotaryova (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
M.Sc. in Nuclear and Particle Physics
Thesis title: “Low background scintillation detector with crystal cadmium tungstate crystal scintillator

- to study double beta decay”
Supervisor: F.A. Danevich
- 2019: V.R. Klavdiienko (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
M.Sc. in Physics and Astronomy
Thesis title: “Investigation of ^{50}V decay scheme”.
Supervisor: F.A. Danevich
- 2019: N.V. Sokur (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
M.Sc. in Physics and Astronomy
Thesis title: “Measurement of ^{212}Po half-life with the help of liquid scintillator with dissolved thorium”.
Supervisor: F.A. Danevich
- 2019: M.M. Zarytskyy (Taras Shevchenko National University of Kyiv, Kyiv, Ukraine)
M.Sc. in Physics and Astronomy
Thesis title: “Search for double beta decay of ^{106}Cd and simulation of background for the CROSS and CUPID experiments”.
Supervisor: F.A. Danevich

Candidate of Sciences (equiv. Ph.D.)

- 1981: Yu.G. Zdesenko, Ph.D. in Physics of Atomic Nuclei and Elementary Particles
Defended at: Institute for Nuclear Research (Moscow, Russia)
Thesis title: “Double beta decay of ^{130}Te ”
- 1986: A.S. Nikolaiko, Ph.D. in Physics of Atomic Nuclei and Elementary Particles
Defended at: Joint Institute for Nuclear Research (Dubna, Russia)
Thesis title: “Results of the research of double beta decay of ^{96}Zr , ^{100}Mo , ^{76}Ge ”
Supervisor: Yu.G. Zdesenko
- 1987: V.M. Kuts, Ph.D. in Physics of Atomic Nuclei and Elementary Particles
Defended at: Institute for Nuclear Research (Kyiv, Ukraine)
Thesis title: “Method of investigation of 2K capture in ^{196}Hg and 2β decay of ^{76}Ge with the help of low background semiconducting spectrometer”
Supervisor: Yu.G. Zdesenko
- 1991: V.I. Tretyak, Ph.D. in Physics of Atomic Nuclei and Elementary Particles
Defended at: Institute for Nuclear Research (Kyiv, Ukraine)
Thesis title: “Simulation and experimental investigations of double beta processes on Mo, Ge, Hg, Cd and W nuclei”
Supervisor: Yu.G. Zdesenko
- 1995: F.A. Danevich, Ph.D. in Physics of Atomic Nuclei and Elementary Particles
Defended at: Institute for Nuclear Research (Kyiv, Ukraine)
Thesis title: “The research of double beta decay of ^{116}Cd with the help of the cadmium tungstate scintillators”
Supervisor: Yu.G. Zdesenko
- 1996: A.G. Prokopets, Ph.D. in Nuclear, Particle and High Energy Physics
Defended at: Grad. University for Adv. Studies (Tsukuba, Japan)
Thesis title: “Development of a large scale liquid xenon ionization drift chamber for searching for neutrinoless double beta-decay of ^{136}Xe ”
Supervisor: M. Miyajima
- 1998: V.V. Kobychiev, Ph.D. in Nuclear, Particle and High Energy Physics
Defended at: Institute for Nuclear Research (Kyiv, Ukraine)
Thesis title: “Double beta decay of cadmium, cerium, gadolinium and tungsten isotopes”
Supervisor: Yu.G. Zdesenko
- 2007: A.S. Georgadze, Ph.D. in Nuclear, Particle and High Energy Physics
Defended at: Institute for Nuclear Research (Kyiv, Ukraine)
Thesis title: “Development for low energy solar neutrino detectors”
Supervisor: V.V. Kobychiev

- 2009: D.V. Poda, Ph.D. in Nuclear, Particle and High Energy Physics
 Defended at: Institute for Nuclear Research (Kyiv, Ukraine)
 Thesis title: “Double beta decay of $^{64, 70}\text{Zn}$ and $^{180, 186}\text{W}$ isotopes”
 Supervisor: F.A. Danevich
- 2011: R.B. Podvivanuk, Ph.D. in Nuclear, Particle and High Energy Physics
 Defended at: Institute for Nuclear Research (Kyiv, Ukraine)
 Thesis title: “Scintillation detectors based on molybdates and tungstates for investigation of double-beta decay and search for dark matter particles”
 Supervisor: F.A. Danevich
- 2011: S.S. Yurchenko, Ph.D. in Nuclear, Particle and High Energy Physics
 Defended at: Institute for Nuclear Research (Kyiv, Ukraine)
 Thesis title: “Beta decay of ^{113}Cd and alpha decay of ^{151}Eu ”
 Supervisor: F.A. Danevich
- 2011: S.S. Nagorny, Ph.D. in Nuclear, Particle and High Energy Physics
 Defended at: Institute for Nuclear Research (Kyiv, Ukraine)
 Thesis title: “Alpha decay of natural isotopes of tungsten”
 Supervisor: F.A. Danevich
- 2012: O.G. Polischuk, Ph.D. in Nuclear, Particle and High Energy Physics
 Defended at: Institute for Nuclear Research (Kyiv, Ukraine)
 Thesis title: “Search for double beta decay of ^{100}Mo , ^{96}Ru and ^{104}Ru ”
 Supervisor: V.I. Tretyak
- 2015: D.M. Chernyak, Ph.D. in Physics
 Defended at: Université Paris-Sud 11 (Orsay, France)
 Thesis title: “Development of cryogenic low background detector based on enriched zinc molybdate crystal scintillators to search for neutrinoless double beta decay of ^{100}Mo ”
 Supervisor: F.A. Danevich, A. Giuliani
- 2015: V.M. Mokina, Ph.D. in Nuclear, Particle and High Energy Physics
 Defended at: Institute for Nuclear Research (Kyiv, Ukraine)
 Thesis title: “Scintillation detectors based on molybdate and tungstate crystals for double beta- decay search”
 Supervisor: F.A. Danevich
- 2019: D.V. Kasperovych, Ph.D. in Nuclear, Particle and High Energy Physics
 Defended at: Institute for Nuclear Research (Kyiv, Ukraine)
 Thesis title: “Double beta decay of ^{116}Cd and ^{150}Nd ”
 Supervisor: F.A. Danevich

Doctor of Sciences (Dr.Sc.)

- 1990: Yu.G. Zdesenko, Dr.Sc. in Nuclear, Particle and High Energy Physics
 Defended at: Institute for Nuclear Research (Kyiv, Ukraine)
 Thesis title: “Double beta decay”
- 2006: F.A. Danevich, Dr.Sc. in Nuclear, Particle and High Energy Physics
 Defended at: Institute for Nuclear Research (Kyiv, Ukraine)
 Thesis title: “Experimental research of double beta decay of atomic nuclei”
 Supervisor: Yu.G. Zdesenko

Senior Scientific Researcher or Senior Researcher (equiv. Associate Professor)

- 1999: V.I. Tretyak
 2000: A.S. Nikolaïko
 2000: Yu.G. Zdesenko
 2002: F.A. Danevich
 2017: V.V. Kobychiev

Professor

2000: Yu.G. Zdesenko
2016: F.A. Danevich

Corresponding Member of the National Academy of Sciences of Ukraine

2003: Yu.G. Zdesenko

Awards

- 2007: F.A. Danevich, V.V. Kobychhev, V.I. Tretyak
Sinelnikov Prize of the National Academy of Sciences of Ukraine 2006 for series of works "Experimental investigations of rare processes in physics of atomic nuclei and particles".
- 2010: S.S. Nagorny, D.V. Poda, O.G. Polischuk, S.S. Yurchenko
Annual Prize of President of Ukraine for young scientist 2010 for the cycle of the experimental studies "Rare nuclear and subnuclear processes".
- 2016: Book "Dark Energy and Dark Matter in the Universe" in 3 volumes (2013, 2014, 2015), Kyiv, Publ. House "Akademperiodyka" obtained two awards:
(1) From the International Academy of Astronautics ("Basic Sciences Book Award");
(2) From the NAS of Ukraine ("Best Monography in Physics, Mathematics and Techniques").
F.A. Danevich, V.V. Kobychhev, V.I. Tretyak are authors of chapter 7 in vol. 3 ("Search for effects beyond the Standard Model of particles in low counting experiments, pp. 245-335).
- 2017: F.A. Danevich, V.V. Kobychhev, V.I. Tretyak; and Yu.G. Zdesenko (posthumously)
State Prize of Ukraine in science and technology 2016 for the cycle of works "Properties of neutrino and weak interactions, search for effects beyond the Standard Model".
- 2018: F.A. Danevich
Honorary Diploma of the Presidium of the National Academy of Sciences of Ukraine and Central Committee of the NASU Labor Union for many years of fruitful work, significant achievements in professional activities, significant personal contributions to the development of national science and on the occasion of the 100th anniversary of the National Academy of Sciences of Ukraine.
- V.V. Kobychhev
Jubilee Honorary Diploma of the Presidium of the National Academy of Sciences of Ukraine for achievements in solving the most important scientific and technical problems, applying scientific developments into the national economy and practice of social and cultural construction, training and education of personnel, active participation in public life and self-sacrificing conscientious work.
- O.G. Polischuk
Jubilee Honorary Diploma of the Presidium of the National Academy of Sciences of Ukraine for achievements in solving the most important scientific and technical problems, applying scientific developments into the national economy and practice of social and cultural construction, training and education of personnel, active participation in public life and self-sacrificing conscientious work.
- V.I. Tretyak
Diploma of the Supreme Council of Ukraine for services to the Ukrainian nation.
- 2019: O.G. Polischuk
Diploma and medal of the International Academy of Rating Technologies and Sociology "Golden Fortune": "National Honor to Ukrainian Scientists 1918-2018".
- 2021: V.V. Kobychhev (and the whole Borexino Collaboration)
[2021 Giuseppe and Vanna Cocconi Prize](#) of the European Physical Society for an outstanding contribution to Particle Astrophysics and Cosmology: the groundbreaking observation of solar neutrinos from the pp chain and CNO cycle that provided unique and comprehensive tests of the Sun as a nuclear fusion engine.

2022: O.G. Polischuk, D.V. Kasperovych, M.V. Romanyuk, N.V. Sokur
Certificate of gratitude of the Presidium of the National Academy of Sciences of Ukraine for fruitful creative work and personal contribution to the successful implementation of the scientific project of the research laboratories of young scientists.

F.A. Danevich

Certificate of gratitude of the Institute of Education Content Modernization of the Ministry of Education and Science of Ukraine for a significant contribution to the development of a New Ukrainian school, provision of high-quality, scientific-methodical, psychological-pedagogical and design expertises of educational and educational-methodical literature.