Dejan Stojkovic

Elected a full member of SANS on April 12, 2023.

Dr. Stojkovic was born in 1971 in Vranje. He finished elementary school "J. J. Zmaj" in Vranje, where he was awarded with the "Golden Pen", given to the best student in the generation. He graduated from high school "Bora Stankovic" in Vranje. There, he was awarded with the "Vukova Diploma" for perfect grades in all of the subjects during schooling, "Alasova Diploma" for exceptional achievements in mathematics, and the "Special Prize in Astrophysics" for exceptional achievements in astrophysics. He participated in numerous national competitions in mathematics, physics and astronomy. The best placement - three-time champion of Serbia and two-time champion of (the former) Yugoslavia, in 1988 and 1989, in astronomy. For his merits in promoting the city of Vranje, he received the "Sedmoseptembarska Nagrada Grada Vranja" in 1989 and 2002. He graduated from the Faculty of Physics, PMF in Belgrade in 1994, as the first in his generation and the only one who did it in strictly four years. During the entire study period, he was the recipient of the "Foundation for the Development of Young Talents of Yugoslavia" scholarship. After graduation, he enrolled postgraduate studies at the Institute of Physics in Belgrade. At the beginning, he was supported by the scholarship from the Ministry of Science and Technology, and later established a full-time appointment at the Institute. As a curiosity, he worked as an assistant in the post-graduate course "Quantum Field Theory II" before officially receiving his master's degree. He was very active as a lecturer at the "Istrazivacka Stanica Petnica", a teaching and research institution for high school talents. In 1997, he defended his master's thesis under the title "Non-singular black holes in d=2 dilaton gravity".

After obtaining his master's degree, he continued education in the USA. He defended his Doctoral dissertation under the title "Implications of massive neutrinos for the vacuum structure of the standard model" in 2001 at "Case Western Reserve University" in Cleveland, which is best known for the first American Nobel Prize in Physics awarded for the Michelson-Morley experiment performed there. After completing his doctorate, he received two renowned postdoctoral positions. From 2001-2003 he held the honorary "Killam Memorial Postdoctoral Fellowship" at the University of Alberta in Edmonton. From 2003-2005 he held the honorary "MCTP" Fellowship at the "University of Michigan" in Ann Arbor. In 2005, he received a professorship at "Case Western Reserve" University. In 2007 he got a professorship at SUNY at Buffalo (State University of New York in Buffalo), where he is still working today. He was promoted to an associate professor with tenure in 2012 (a year before the date stipulated in the contract), and to a full professor in 2017 (two years before the date stipulated in the contract).

Contribution to science:

Dr. Stojkovic's research spans a wide range of topics in high energy physics broadly defined, including cosmology, gravity and elementary particles. He is the author of more than 100 papers published in leading scientific journals, which have so far been cited about 3620 times with an h-index of 35 according to "Inspire" database for high energy physics, or 4050 times and h-index 38 according to "Google Scholar" (April 2023). In wide scientific circles, he is best known for his work on black holes, cosmological problems and theories in multi-dimensional spaces. In addition to his home university, his scientific work is also financed by the American "National Science Foundation".

Dr. Stojkovic serves as a reviewer of papers in the most prestigious academic journals in physics such as Phys.Rev.Lett.; Phys.Rev.D.; JHEP; JCAP; Class.Quan.Grav.; Phys.Lett.B; Gen. Rel. Grav. He also regularly serves as a grant reviewer and panel participant in the American NSF, NASA and DOE, the Canadian NSERC, as well as the European Austrian Science Fund (FWF). In 2011, he served as the chair of the NASA Gravitational Physics Grant Panel.

One of the currently most significant contributions of Dr. Stojkovic to science is his program "Black Max" - an event generator that contains almost everything we know about black holes today. The world's largest particle accelerator, LHC at CERN, is currently using it to search for new physical processes, primarily the effects of quantum gravity at low energies.

Teaching Activity

Dr. Stojkovic teaches a wide range of subjects in physics, from introduction to classical mechanics to postgraduate courses in cosmology and gravity. His student evaluations are among the best at the entire university. He is the author of the book "Massive neutrinos and the topology of the standard model" published by the German Verlag Dr. Müller. Seven scientists are under his supervision received doctorates so far: Eric Greenwood, Evan Halstead, Bob Polits, Anshul Saini, Ruifeng Dong, Rance Solomon and Peng Hao. The first three are now professors at the American universities. Currently, three more PhD students are working with him.

Connection with Serbia

Dr. Stojkovic maintains strong connections with Serbia and his colleagues at our institutions. He regularly gives lectures at the Institute of Physics, Kolarac, University of Nis, and Vranje. He also participated in organization of numerous international scientific meetings in Serbia, the most important of which are: Mathematical Physics Meeting (2013 and 2014 year), Balkan Workshop (2007, 2011 and 2013), Balkan Summer Institute (2011), Spring School of Physics (2009).

In 2012, he was awarded a prize for his merits in physics and relations with Serbian science "Marko Jaric" popularly known as the "Serbian Nobel Prize". The same year, he received a special recognition for great merit in the operation of the SEENET-MTP network (Network for Mathematics and Theoretical Physics of South-Eastern Europe.

More detailed information can be found on the websites:

http://www.acsu.buffalo.edu/~ds77/
https://scholar.google.com/citations?user=qqUNcY0AAAAJ&hl=en
https://inspirehep.net/literature?sort=mostrecent&size=25&page=1&q=a%20stojkovic%2Cd&ui-citation-summary=true

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  De-Chang Dai, Glenn D. Starkman, Branislav Stojkovic, Dejan Stojkovic, Amanda Weltman
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  Jonas R. Mureika, Dejan Stojkovic
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- Distinguishing between the small ADD and RS black holes in accelerators
  Dejan Stojkovic
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- Black hole as a point radiator and recoil effect in the brane world
  Valeri P. Frolov, Dejan Stojkovic
  Published in Phys.Rev.Lett. 89 (2002) 151302