April 3, 2025

Dr. Samo Stanič – CV

General

- Date and place of birth: March 10, 1969, Kranj, Slovenia
- Slovenian researcher ID: 14573
- E-mail: samo.stanic@ung.si
- Web: *https://www.ung.si/en/research/cac/staff/samo-stanic/*
- Language skills: English, Japanese, German, Italian

Degrees

- PhD in physics, *Search for charged Higgs bosons at LEP 2 collider*, Univeristy of Ljubljana, Slovenia (1999)

Habilitation

- Full professor of physics at the University of Nova Gorica, Slovenia (2012-)

Employment history

- Jožef Stefan Institute, Slovenia, research assistant (1993-2001)
- University of Tsukuba, Japan, postdoctoral researcher (1999-2001)
- High Energy Accelerator Research Organization (KEK), Japan, postdoctoral researcher (2001-2003)
- University of Tsukuba, Japan, foreign professor (2003-2005)
- University of Nova Gorica
  - Center for Astrophysics and Cosmology, researcher (2001-2019)
  - Center for Atmospheric Research, head (2008-2019)
  - Graduate School, director of the PhD program in Physics (2009-2014)
  - School of Science, dean (2014-2020)
  - Center for Astrophysics and Cosmology, head (2020-)

Other appointments and functions

- Member of the Strategic council for digital transformation of Slovenia (2024-)
- Member of the governing board of Academic and Research Network of Slovenia (2023-)
- Coordinator of the Slovenian national supercomputing network - SLING (2022-)
- Head of the infrastructure activities at the University of Nova Gorica (2022-2028)
- Delegate of Slovenia in CTAO ERIC Council (2025-)
- Member of the governing board of the Institute of Information Science, Slovenia (2015-2021)

Awards

- Institutional decoration *Order of merit of the Republic of Slovenia* for exceptional academic achievements of the University of Nova Gorica (2015)
- Award *Primorski um* for research excellence (2015)
- *Slovenian national award (Zois award)* for the achievements in the research of ultra-high energy cosmic particles (with A. Filipčič and M. Zavrtanik, 2020)

Expert committees

- Member of scientific councils of *ISAPP* (2007-2019) and *IDPASC* (2012-2019) doctoral schools
- Chair of the organizing committee of *Time and Matter* (2007, 2009, 2013) conferences

Areas of interest

- *Experimental astrophysics* – research of cosmic particles at extreme energies – use of high performance computing for simulations of astrophysical phenomena and implementation of machine learning based data analysis techniques for large experimental datasets
- *Atmospheric physics and remote sensing* – investigation of atmospheric structures and their dynamics, atmospheric monitoring and instrumentation for astrophysical observatories – use of high performance computing for hydrodinamic simulations of small-scale atmospheric models
- *Eksperimental high energy physics* – research of B decays and radiation damage in silicon detectors – application of distributed computing for the analysis of extensive experimental datasets
- h-index: 85 (SICRIS / WoS)

Ongoing projects

Acronym	Title	Role	Time	Agency
P1-0031	Multimessenger astrophysics	V	2022-2027	ARIS
J1-60014	Atmospheric Raman lidar for the northern Cherenkov Telescope Array Observatory and its use in high precision measurements of very high energy cosmic rays	V	2025-2027	ARIS
I0-E018	ESFRI project CTA (Cherenkov Telescope Array)	V	2021-2030	ARIS
EUMaster4HPC	European Master for High Performance Computing	R	2022-2025	H2020

V - project leader, R - researcher, ARIS - Slovenian Research and Innovation Agency.

International collaborations

- Member of the Cherenkov Telescope Array consortium (2010-) and leader of the Slovenian team (2020-)
- Member of the Pierre Auger Collaboration, Argentina, UNG representative (2010-)
- Member of the Belle and Belle2 collaborations, KEK, Japan (1999-)
- Bilateral collaborations with partners from China, Italy, Spain and Germany in the field of remote sensing

Journal referee

- Nuclear Instruments and Methods A (Elsevier)
- Atmospheric Environment (Elsevier)
- Measurement (Elsevier)
- Applied Optics (OSA)
- Remote Sensing (MDPI)
- Atmosphere (MDPI)
- Sensors (MDPI)

Scientific memberships

- Eurepean Physics Society through the Society of mathematicians, physicists and astronomers of Slovenia (1999-)

Teaching record

– lecturer in BSc, master and PhD programmes of physics at the UNG

Adviser to PhD and undergraduate physics students at the UNG

– M. Živec, *Characterization of Atmospheric Properties Over the Cherenkov Telescope Array at La Palma*, (PhD, 2023)
– M. Bervida, *Bora wind effects on common structures in the Vipava valley*, (PhD, 2020)
– M. Živec, *Space weather research with the Pierre Auger Observatory*, (Masters, 2019)
– L. Wang, *Study of atmospheric aerosol properties in the Vipava valley*, (PhD, 2018)
– M. Mole, *Study of the properties of air flow over orographic barrier*, (doktorat, 2017)
– M. Živec, *Measurements and modeling of air mass motion in the troposphere*, (BSc, 2016)
– T. He, *Study of Atmospheric Aerosol Transport Processes on Local and Regional Scales*, (PhD, 2013)
– F. Gao, *Study of Processes in Atmospheric Boundary Layer over Land-Sea Transition Interface Using Scanning Lidar*, (PhD, 2012)
– I. Vasilevska, *Meritev dnevnega cikla variacij lastnosti planetarne mejne plasti*, (BSc, 2012)

Relevant publications

– BALLESTER, O. *et al.*, *A 1.8 m class pathfinder Raman LIDAR for the Northern Site of the Cherenkov Telescope Array Observatory – Technical Design*, Remote Sens. **17(6)**, 1074 (2025).

– SRIPATHI ACHARYA, B. *et al.*, Cherenkov Telescope Array Consortium, *Sensitivity of the Cherenkov Telescope Array to a dark matter signal from the Galactic centre*, JCAP **01** 057 (2021).

– SRIPATHI ACHARYA, B. *et al.*, Cherenkov Telescope Array Consortium, *Science with the Cherenkov Telescope Array*, World Scientific, New Jersey (2019).

– ABBOTT, B. P. *et al.*, Multi-messenger observations of a binary neutron star merger, *The Astrophysical Journal Letters*, **848**, 1-59 (2017).

– AAB, A. *et al.*, AUGER Collaboration. Observation of a large-scale anisotropy in the arrival directions of cosmic rays above $8 \times 10^{18} eV$, *Science*, **357**, 1266-1270 (2017).

– LIN, S.-W. *et al.*, Belle Collaboration. Difference in direct charge-parity violation between charged and neutral B meson decays, *Nature*, **452**, 332–335 (2008).

– ABE, R. *et al.*, Belle Collaboration, Observation of large CP violation in the neutral B meson system, *Physical Review Letters*, **87**, 091802-1-091802-7 (2001).

– SCHAEL, S. *et al.*, The ALEPH Collaboration, The DELPHI Collaboration, The L3 Collaboration, The OPAL Collaboration, The SLD Collaboration, The LEP Electroweak Working Group, The SLD Electroweak and Heavy Flavour Groups. Precision electroweak measurements on the Z resonance, *Physics reports*, **427**, 257-454 (2006).