



## THEORY

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## DLCP-2021. Call for Paper

**5th International Workshop on Deep Learning in Computational Physics (DLCP-2021)**  
[<https://theory.sinp.msu.ru/doku.php/dlcp21/about>]

**June 28-30, 2021, ZOOM video conference**

The workshop primarily focuses on the use of machine learning in cosmic ray astrophysics, but is not limited to this area. Topics of interest are various applications of artificial neural networks to physical problems, as well as the development of new modern machine learning methods for analyzing various scientific data, including big data.

The working language is English.

### Organizers

Karlsruhe Institute of Technology (Karlsruhe, Germany)

D.V. Skobeltsyn Institute of Nuclear Physics, M.V. Lomonosov Moscow State University (Moscow, Russia)

Matrosov Institute for System Dynamics and Control Theory SB RAS (Irkutsk, Russia)

### The main topics

- Modern machine learning method in physics
- Deep learning in cosmic ray astrophysics
- Generative adversarial network for modelling of physics phenomena
- Multi-messenger data analysis in astroparticle physics
- Application in biology and other natural sciences
- Modern trends in machine learning

## Program committee

Prof. A. Haungs (KIT, Karlsruhe) — Co-Chair  
A. Kryukov (MSU, Moscow) — Co-Chair  
Academician I. Bychkov (ISDCT SB RAS, Irkutsk)  
A. Demichev (MSU, Moscow)  
A. Shigarov (ISDCT SB RAS, Irkutsk)  
V. Tokareva (KIT, Karlsruhe)

## Local organizing Committee

A. Kryukov (MSU, Moscow) — Chair  
A. Shigarov (ISDCT SB RAS, Irkutsk)  
J. Dubenskaya (MSU, Moscow)  
V. Tokareva (KIT, Karlsruhe)

## Place

Due to the situation regarding the coronavirus (COVID-19), the Organizing committee decided to organize the workshop remotely via Zoom platform.

## Important dates

- Abstract submission — June 14, 2021
- Notification of acceptance — June 21, 2021
- The Workshop — June 28-30, 2021
- Paper submission — August 16, 2021

## Registration and abstract submission

The registration and abstract submission should be done via the website: [Registration \[https://theory.sinp.msu.ru/doku.php/dlcp21/registration\]](https://theory.sinp.msu.ru/doku.php/dlcp21/registration)

## Proceedings

The selected papers will be published online on [CEUR-WS \[https://CEUR-WS.org\]](https://CEUR-WS.org) and **indexed Scopus**. Note that CEUR-WS focuses on the disciplines of computer science, information systems, and information technology.

Submissions should be in English and formatted in Springer LNCS style. We invite two types of submissions: REGULAR PAPERS describe research not published or submitted elsewhere (10-12 pages). SHORT PAPERS may be position papers, description of research prospects, challenges, projects, ongoing works, or applications (5-9 pages).

## Contacts

All correspondence concerning the workshop should be addressed by e-mail:  
[Alexander Kryukov and Victoria Tokareva \[mailto:kryukov@theory.sinp.msu.ru, victoria.tokareva@kit.edu\]](mailto:kryukov@theory.sinp.msu.ru)