Multi-messenger astroparticle physics for the public via the astroparticle.online project

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astroparticle.online



Astroparticle.online is an outreach project created in a framework of GRADLC initiative. Our goal is to make astroparticle physics open and accessible for everyone through sharing our knowledge, materials, data and available information resources with a broad public.

Astroparticle.online provides a vast array of resources:

In the Science section you can get information about multi-messenger astronomy, while the section Experiments describes the modern observatories aimed on multi-messenger registration. With section Events you will always be aware of all conferences, workshops and seminars in the field of particle and

- Aim: bring multi-messenger astronomy to the public
- Realization: live masterclasses, articles and interactive materials on <u>https://astroparticle.online/</u>
- Educational direction of GRADLCI
- Created in the framework of Baikal Multi-messenger Lab at ISU
- Audience: high school and bachelor students
- Supported by: TAIGA and KASCADE collaborations
- Live events: Irkutsk, Russia

Acknowledgements

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News

Selections from 2020: A Twinkling Black Hole 29.12.2020 Recent observations show that the supermassive black hole at the center of the Milky Way, Sagittarius A*, flickers on a regular timescale of 30

- ~10 masterclasses
- course "Introduction to astroparticle physics" at ISU
- > 300 students
- Baikal summer school -18, -19
- DLC-18, -19, -20

See also: PoS (ICRC 21) 938

Figures: a) Dr. A. Haungs gives a lecture on *multi-messenger* astronomy for broad audience, ISU, 2019 b) Data analysis masterclass, ISU, 2018 c) Students at an excursion to Baikal GVD





Lectures and masterclasses













Karlsruhe Institute of Technology Institut für Astroteilchenphysik (IAP)

Online education



- Tasks
- Tests
- Labs, Data analysis TAIGA CNN client

Let's check yourself and determine which type of the particle is it?



Interactive deep-learning based application TAIGA CNN client

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