Invitation to cooperation — distributing small detector arrays for CREDO

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Source: Government agency — National Science Centre Program name: PRELUDIUM¹ Target: PhD students Duration: 2 years Funds: 140 000 PLN Submission deadline: 17.06.2024

¹https://ncn.gov.pl/en/ogloszenia/konkursy/pre≟udium23(≧) ≧ ∽⊙<



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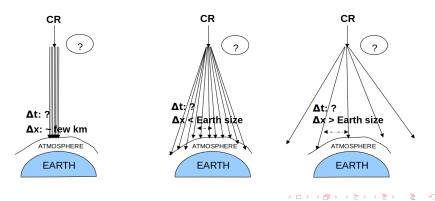
Results of competition: December 2024

¹https://ncn.gov.pl/en/ogloszenia/konkursy/preludium23 📳 📑 🔗 🔍

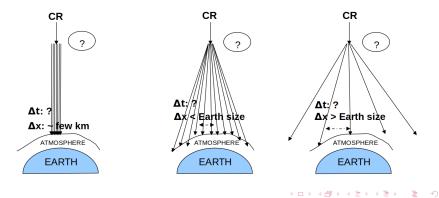
Goal of the project

Our goal:

To create a basis for network of small detector arrays (starting from 6 stations) to search for Cosmic Ray Ensembles. **What can be done as part of proposed project?** Five arrays can be constructed and delivered to institutions in Poland and abroad.



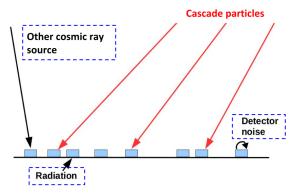
International cooperation is scientifically justified!



Goal of the project

How such station works?

Up to eight small scintillator detectors, based on CosmicWatch², are connected in a coincidence circuit to detect Extensive Air Showers.



²http://www.cosmicwatch.lns.mit.edu/

Installation in your institution

Workshop:

- Lecture about CREDO and cosmic rays.
- Hands-on training for students on how such detectors work and how to build them.
- Laboratory classes to practice how to conduct measurements.





What do we offer?

Detector station:

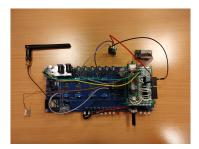
8 scintillators (top figure) + master unit (bottom figure). **Tools:**

Housing for outdoors measurements, accessories for experiments with students.

Residence time:

At least to the end of the project (around 1.5 year).





Costs of such station is around 5000 PLN \approx 1170 EUR.

You can buy parts and we can built it together if you want.

If you are interested in any cooperation — please contact me!

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