

COSMIC CODE



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• Visegrad Fund



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Publisher

The Henryk Niewodniczański Institute of Nuclear Physics
Polish Academy of Sciences

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Kraków 2024

Script: Ewa Borsuk, Józef T. Borsuk

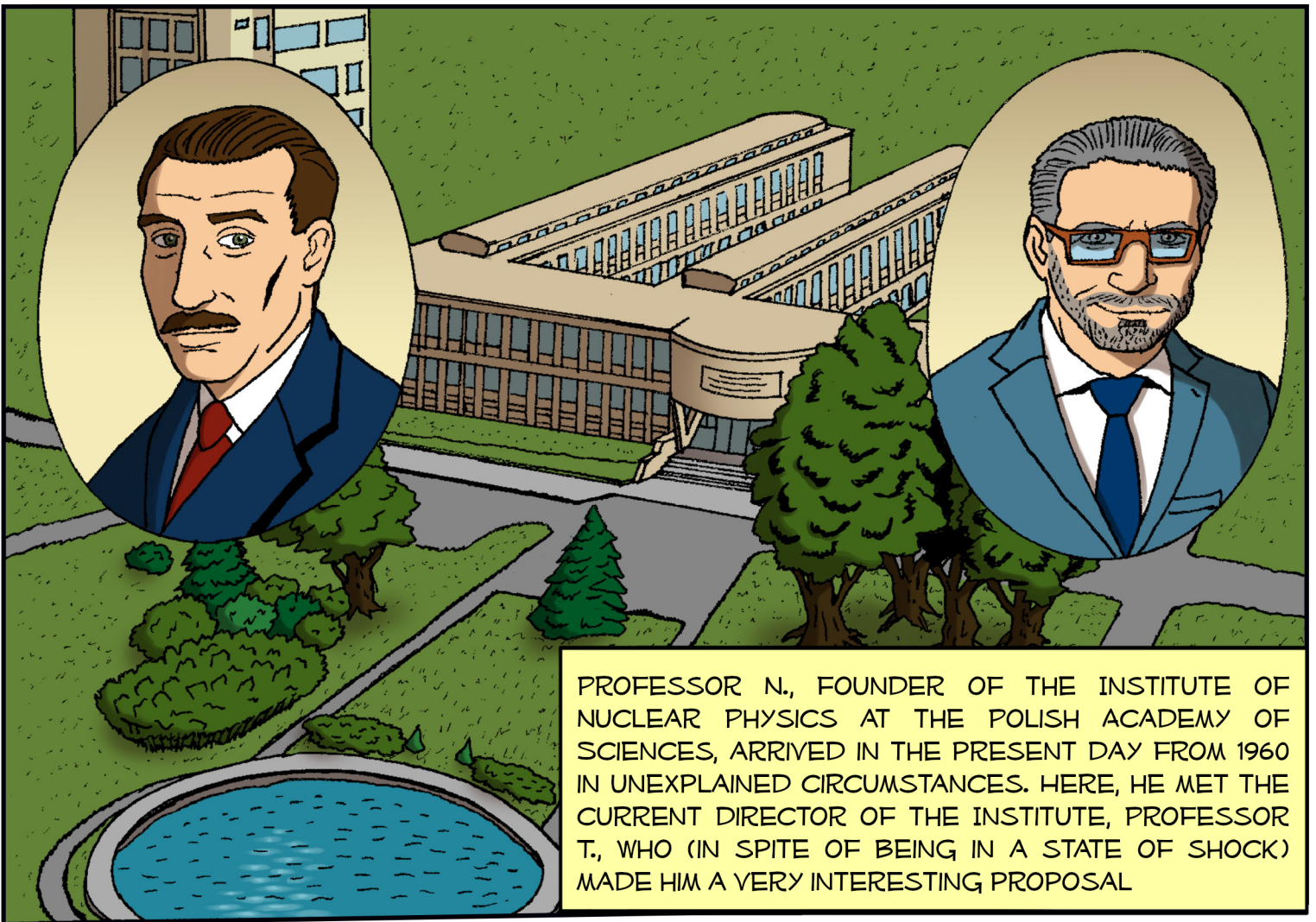
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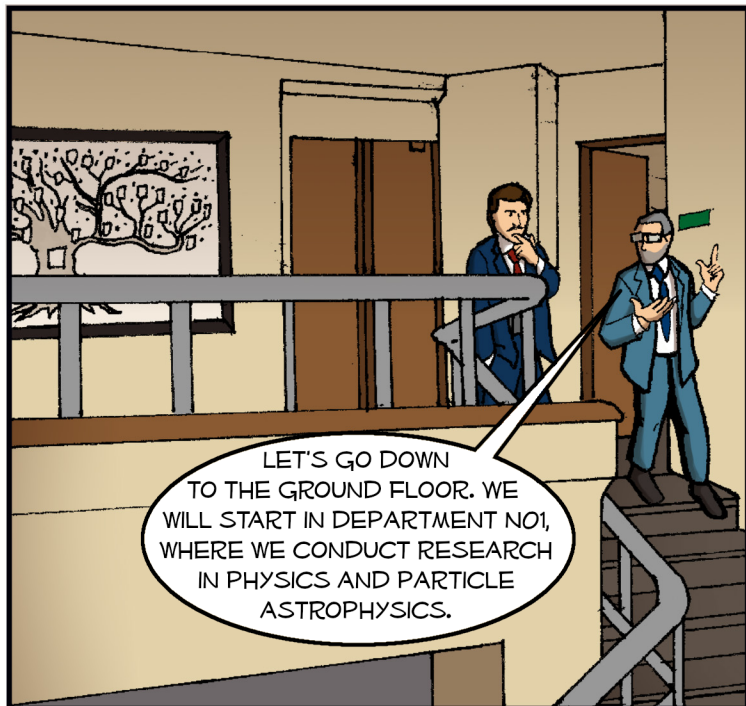
Translation: Anna Mirek, LENGUANA



PROFESSOR N., FOUNDER OF THE INSTITUTE OF NUCLEAR PHYSICS AT THE POLISH ACADEMY OF SCIENCES, ARRIVED IN THE PRESENT DAY FROM 1960 IN UNEXPLAINED CIRCUMSTANCES. HERE, HE MET THE CURRENT DIRECTOR OF THE INSTITUTE, PROFESSOR T., WHO (IN SPITE OF BEING IN A STATE OF SHOCK) MADE HIM A VERY INTERESTING PROPOSAL

PROFESSOR NIEWODNICZAŃSKI,
LET ME TAKE THIS UNIQUE OPPORTUNITY TO SHOW YOU AROUND
OUR - OR RATHER **YOUR** - INSTITUTE. YOU WILL SEE THE RESEARCH
WE ARE CONDUCTING AND WHAT DISCOVERIES
WE HAVE MADE SO FAR.

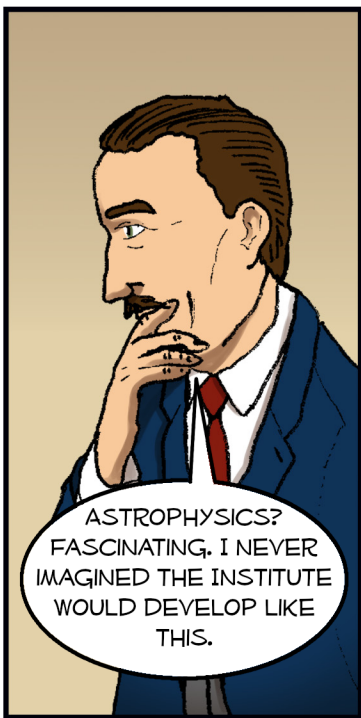
THAT'S VERY KIND OF YOU!
THIS IS A ONCE IN A LIFETIME
OPPORTUNITY AND IT DOESN'T HAPPEN
TO **EVERYONE!** WHERE SHALL
WE BEGIN?



LET'S GO DOWN TO THE GROUND FLOOR. WE WILL START IN DEPARTMENT NO1, WHERE WE CONDUCT RESEARCH IN PHYSICS AND PARTICLE ASTROPHYSICS.



GOOD... WE'RE ALMOST THERE...



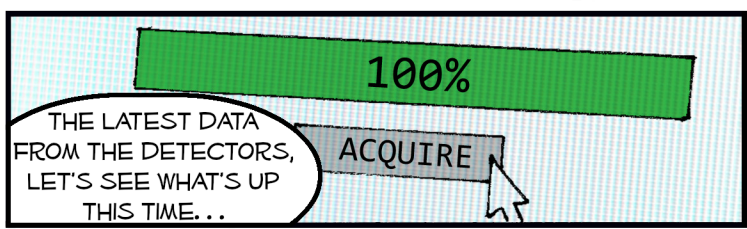
ASTROPHYSICS? FASCINATING. I NEVER IMAGINED THE INSTITUTE WOULD DEVELOP LIKE THIS.



IN MORE THAN 70 YEARS, YOU MUST HAVE MADE QUITE SOME PROGRESS IN THE AREA?



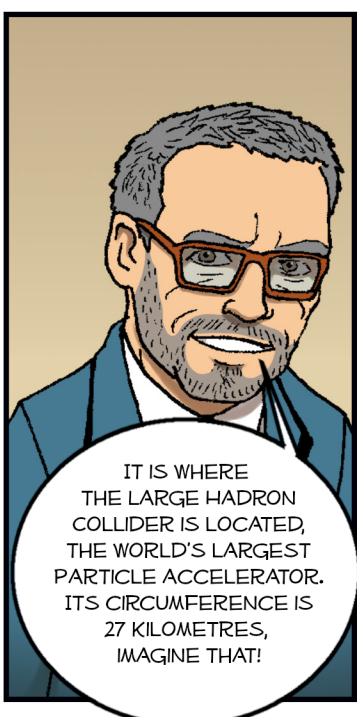
JUST A FEW SECONDS MORE...



THE LATEST DATA FROM THE DETECTORS, LET'S SEE WHAT'S UP THIS TIME...



ABSOLUTELY! AND NOT JUST THIS AREA, MANY OTHERS, TOO. YOU MIGHT HAVE HEARD ABOUT THE CERN EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH? IT WAS ESTABLISHED IN 1954 IN SWITZERLAND AND WE WORK IN CLOSE COOPERATION WITH THEM.



IT IS WHERE THE LARGE HADRON COLLIDER IS LOCATED, THE WORLD'S LARGEST PARTICLE ACCELERATOR. ITS CIRCUMFERENCE IS 27 KILOMETRES, IMAGINE THAT!

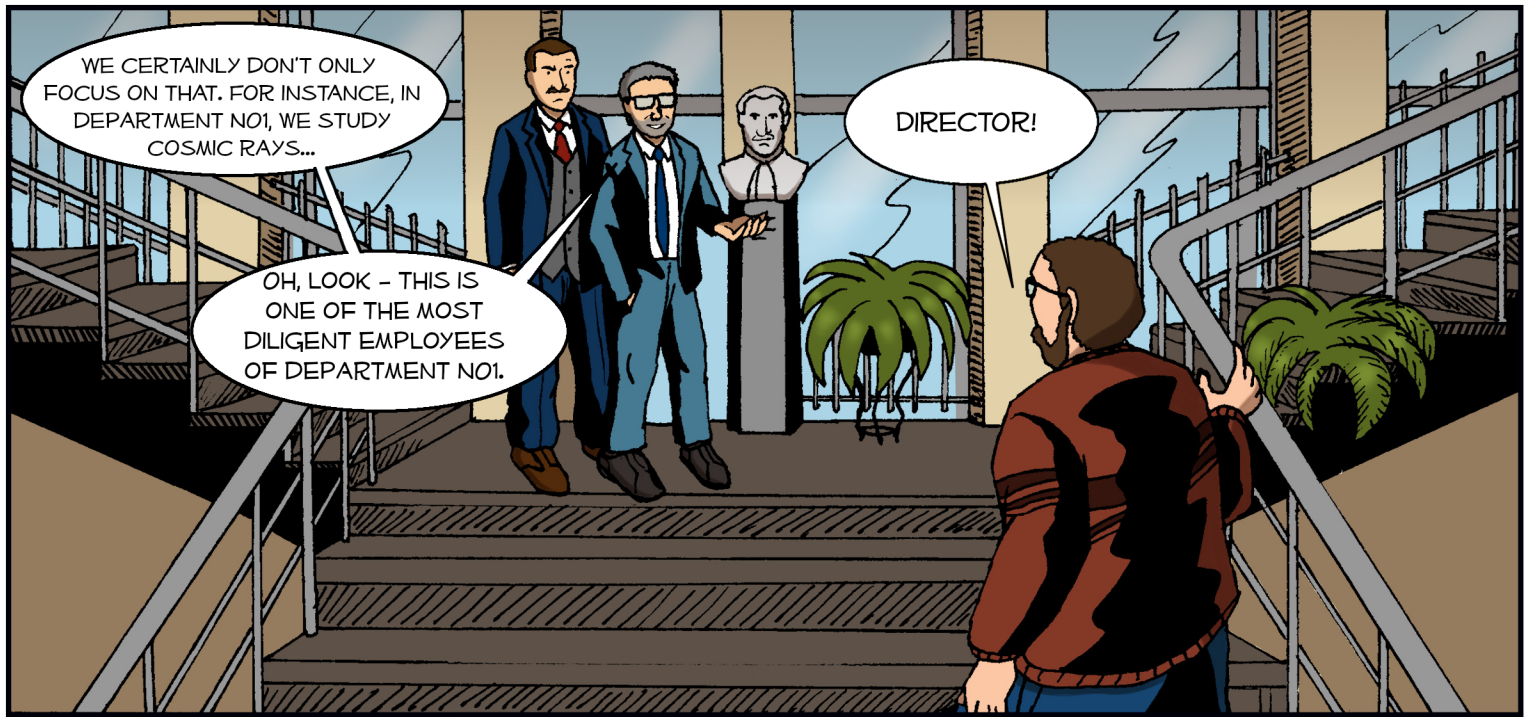


WHAT... HOW... GOODHEAVENS!



I'VE NEVER SEEN ANYTHING LIKE THIS! IT'S INCREDIBLE!

HAVE TO SHOW THIS TO SOMEONE IMMEDIATELY!



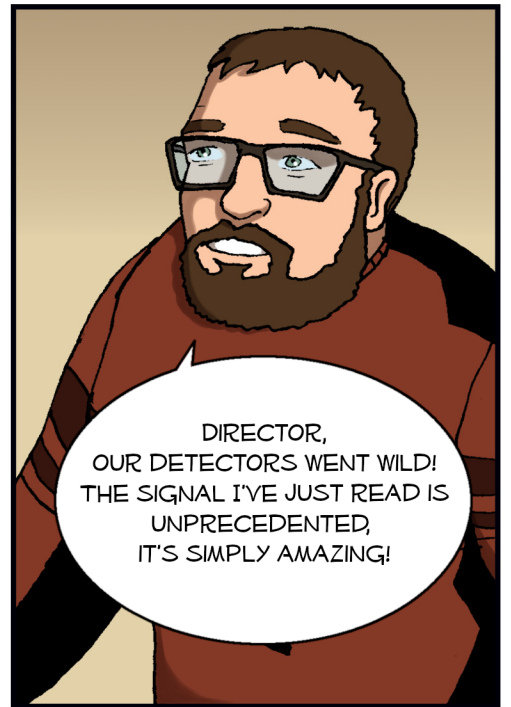
WE CERTAINLY DON'T ONLY FOCUS ON THAT. FOR INSTANCE, IN DEPARTMENT NO1, WE STUDY COSMIC RAYS...

DIRECTOR!

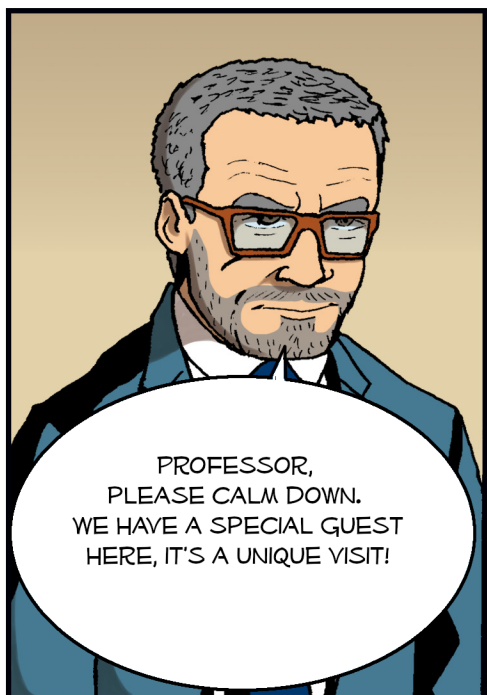
OH, LOOK - THIS IS ONE OF THE MOST DILIGENT EMPLOYEES OF DEPARTMENT NO1.



EXCUSE ME! IT'S A MATTER OF SCIENTIFIC IMPORTANCE!



DIRECTOR, OUR DETECTORS WENT WILD! THE SIGNAL I'VE JUST READ IS UNPRECEDENTED, IT'S SIMPLY AMAZING!



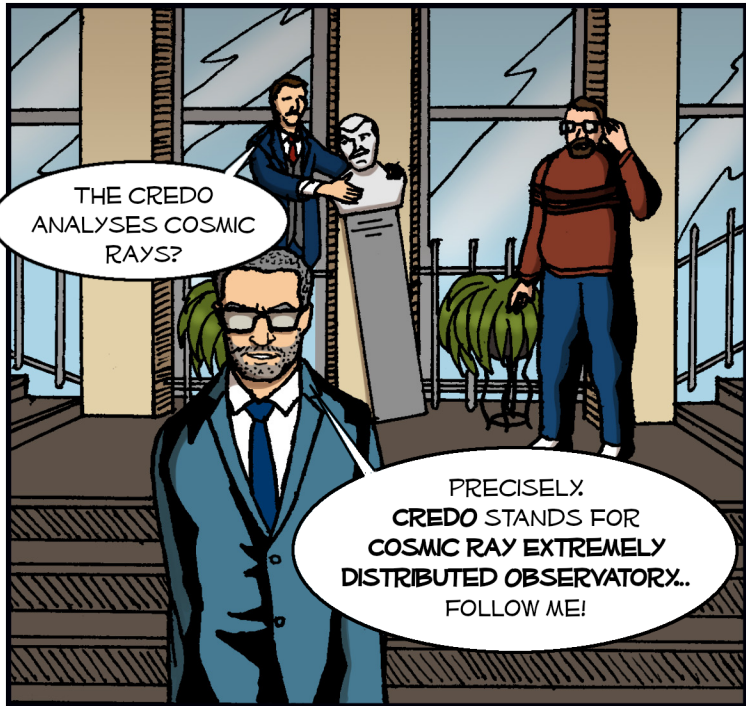
PROFESSOR, PLEASE CALM DOWN. WE HAVE A SPECIAL GUEST HERE, IT'S A UNIQUE VISIT!



AHEM, IT IS MY PLEASURE TO INTRODUCE PROFESSOR **CLARK REDO**. HE WORKS ON THE **CREDO** PROJECT, AIMED AT STUDYING **COSMIC RAYS**.



PROFESSOR, COULD YOU SHOW OUR GUEST WHAT HAS FASCINATED YOU SO MUCH?

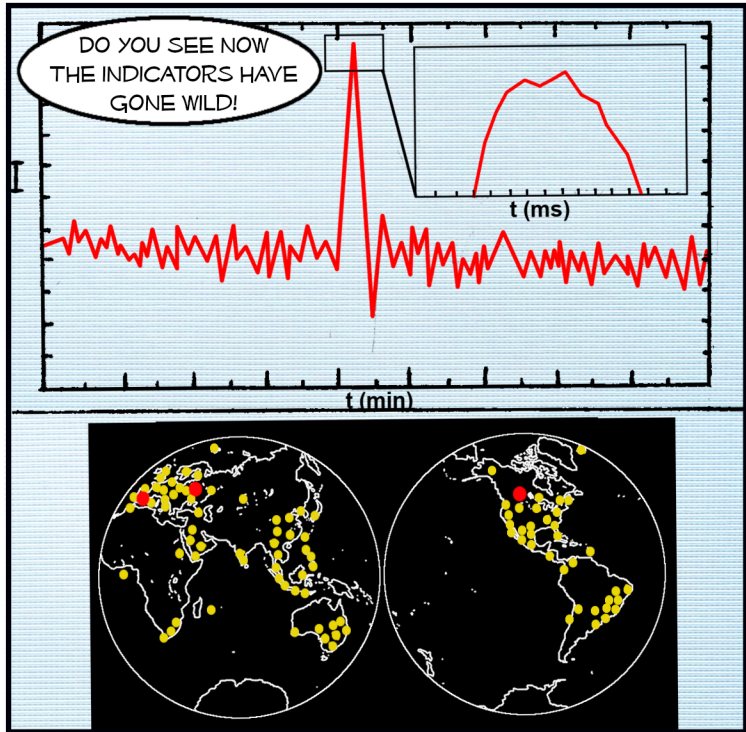


THE CREDO ANALYSES COSMIC RAYS?

PRECISELY. CREDO STANDS FOR COSMIC RAY EXTREMELY DISTRIBUTED OBSERVATORY... FOLLOW ME!



WELCOME TO MY KINGDOM! EVERYTHING IS ON MY COMPUTER.



DO YOU SEE NOW THE INDICATORS HAVE GONE WILD!

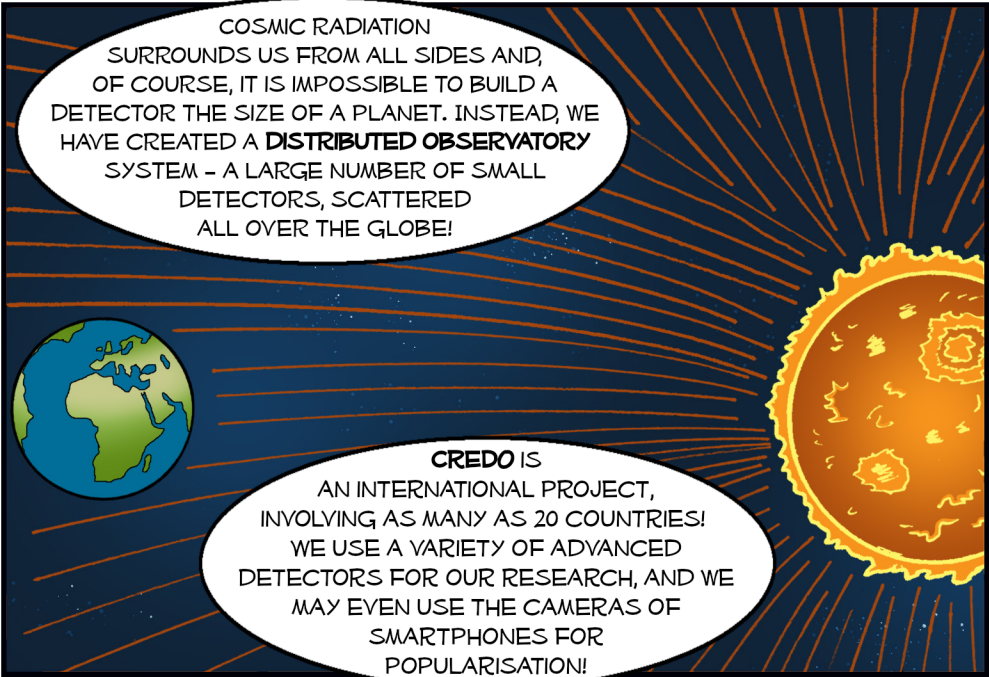


THANKS TO OUR DISTRIBUTED DETECTORS, WE CAN SEE THAT WE RECORDED A SIMILAR SIGNAL IN THREE PLACES ON EARTH.



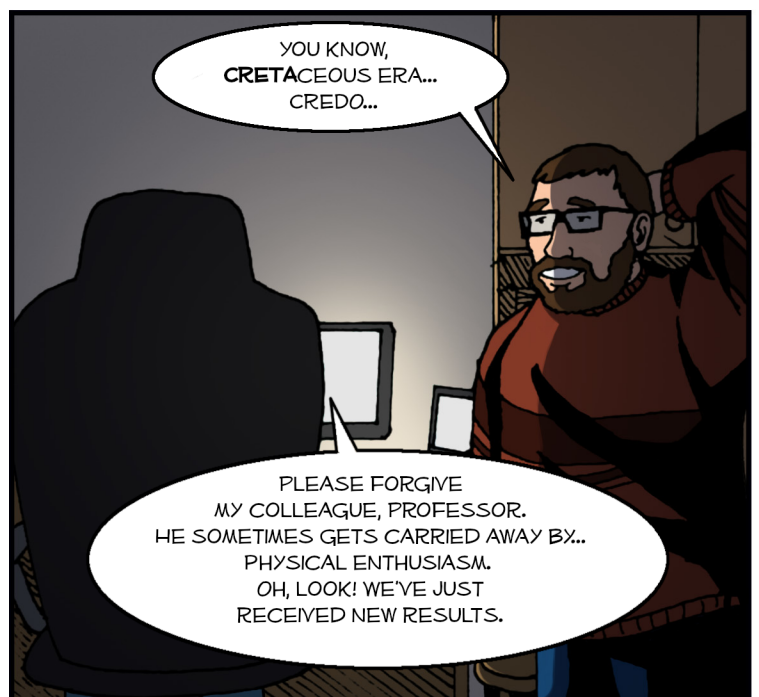
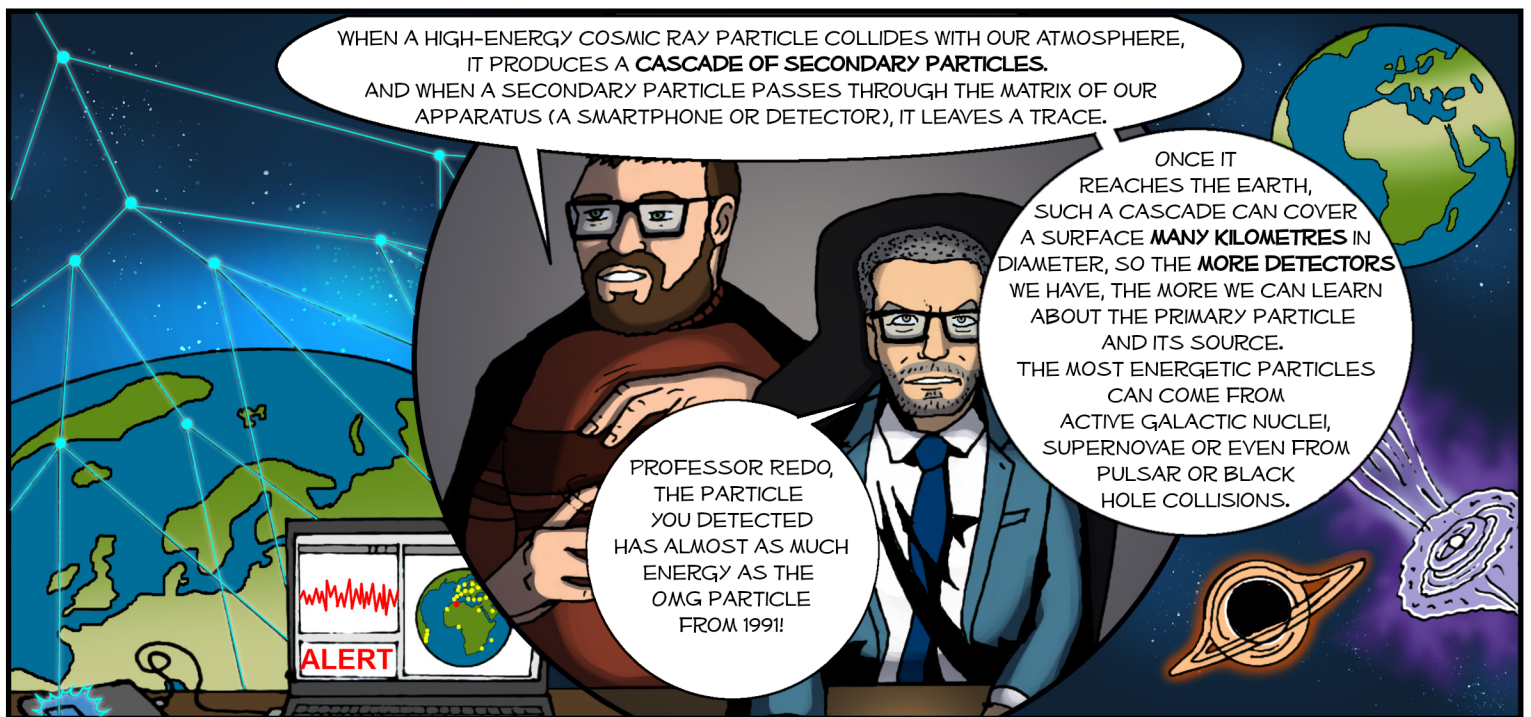
AMAZING. HOW DO YOU STUDY THAT? HAVE YOU BUILT A DETECTOR THE SIZE OF THE EARTH...?

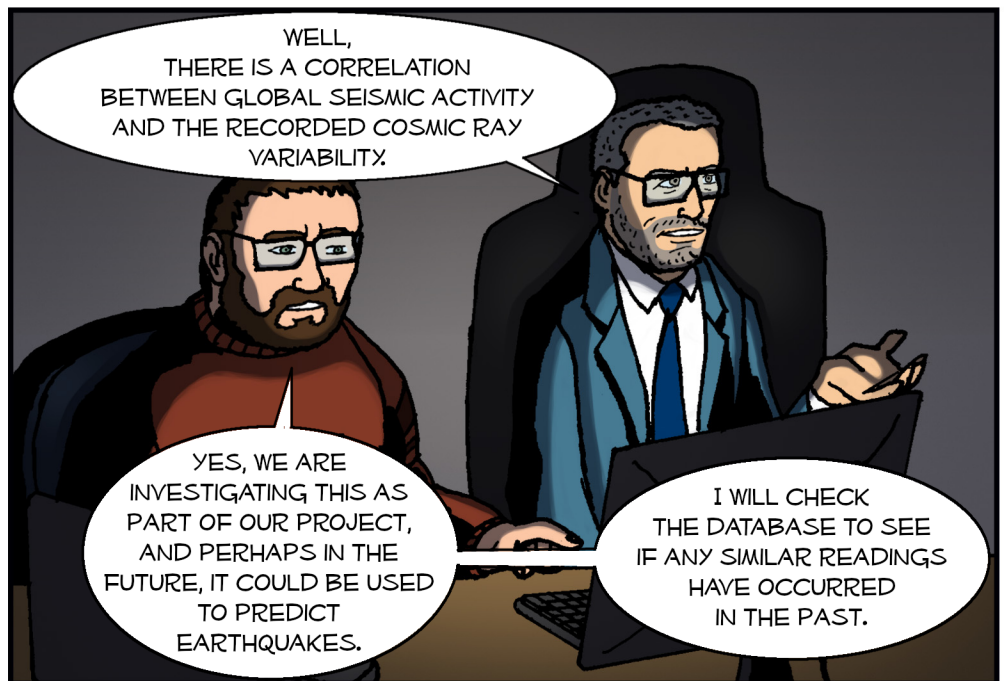
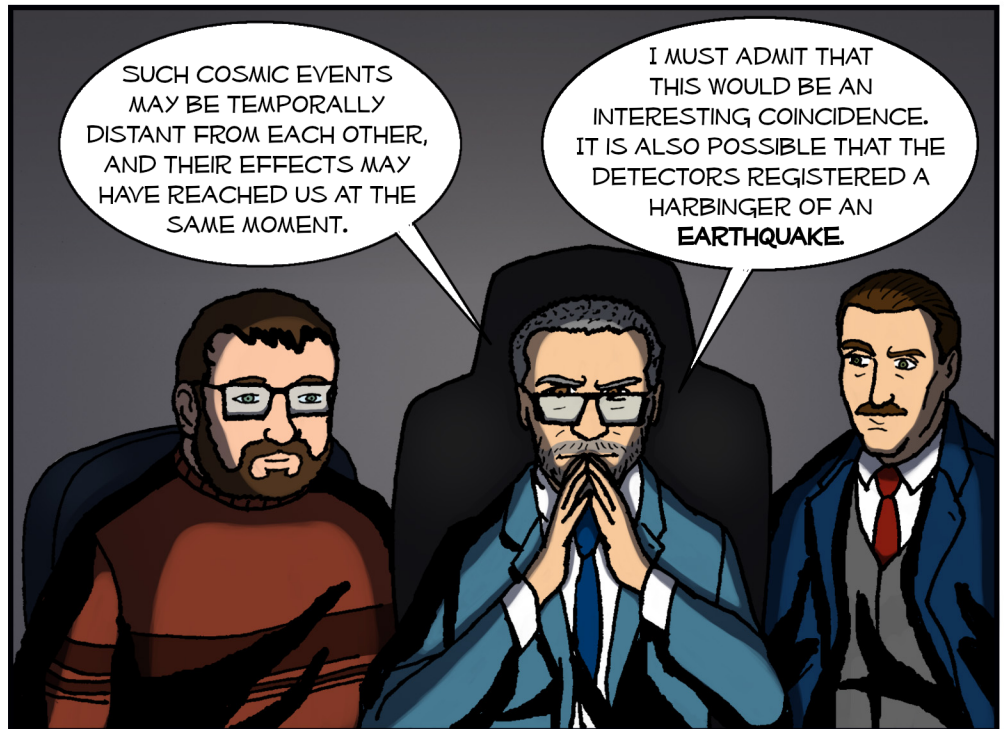
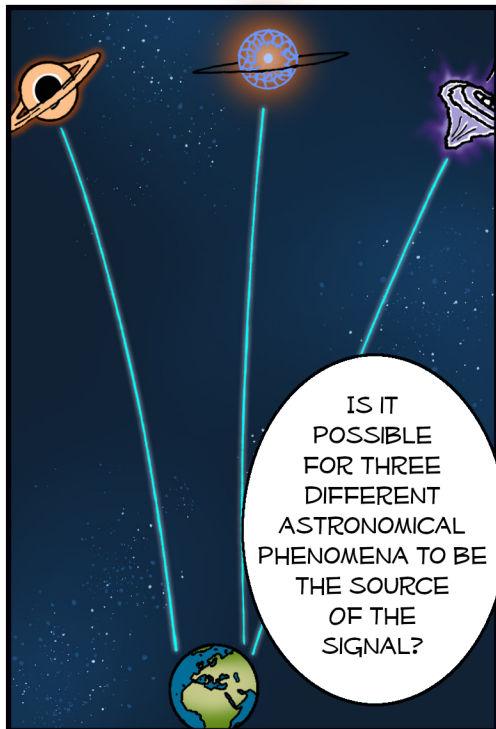
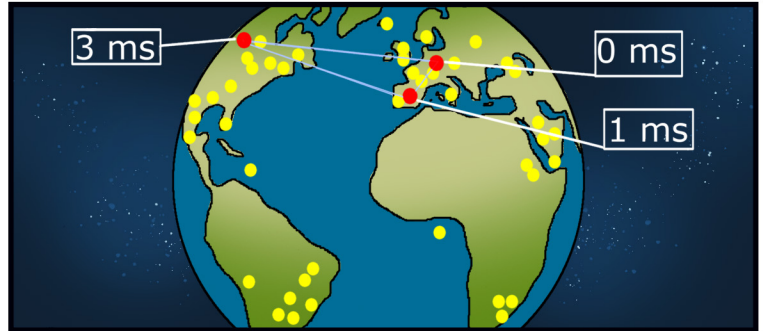
THAT'S WHERE ALL THE GENIUS OF THE CREDO PROJECT LIES!

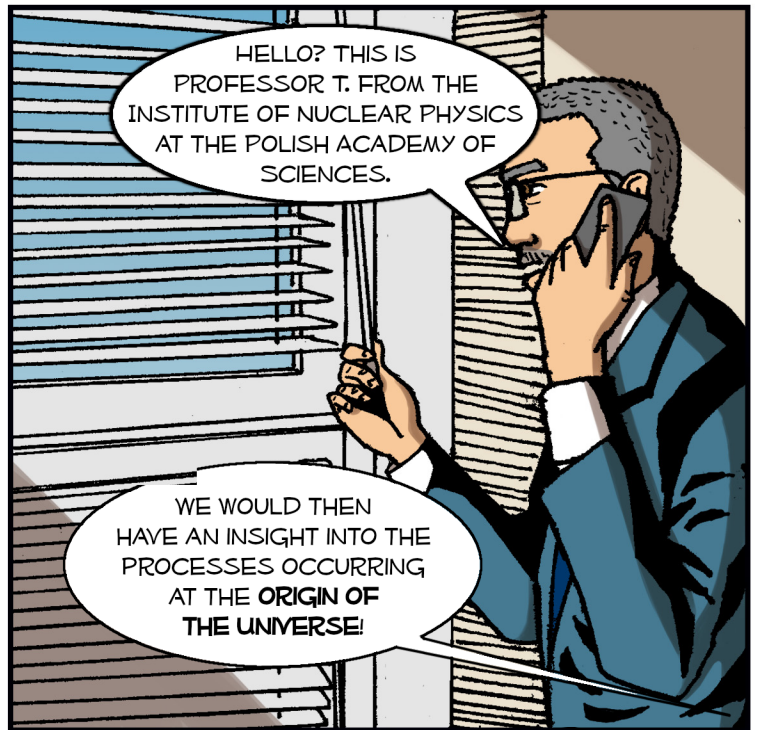
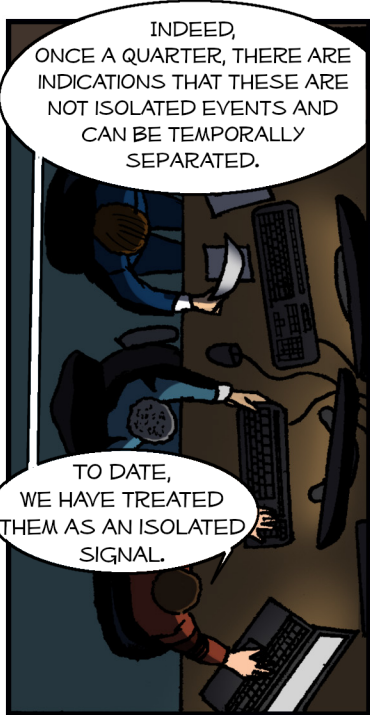


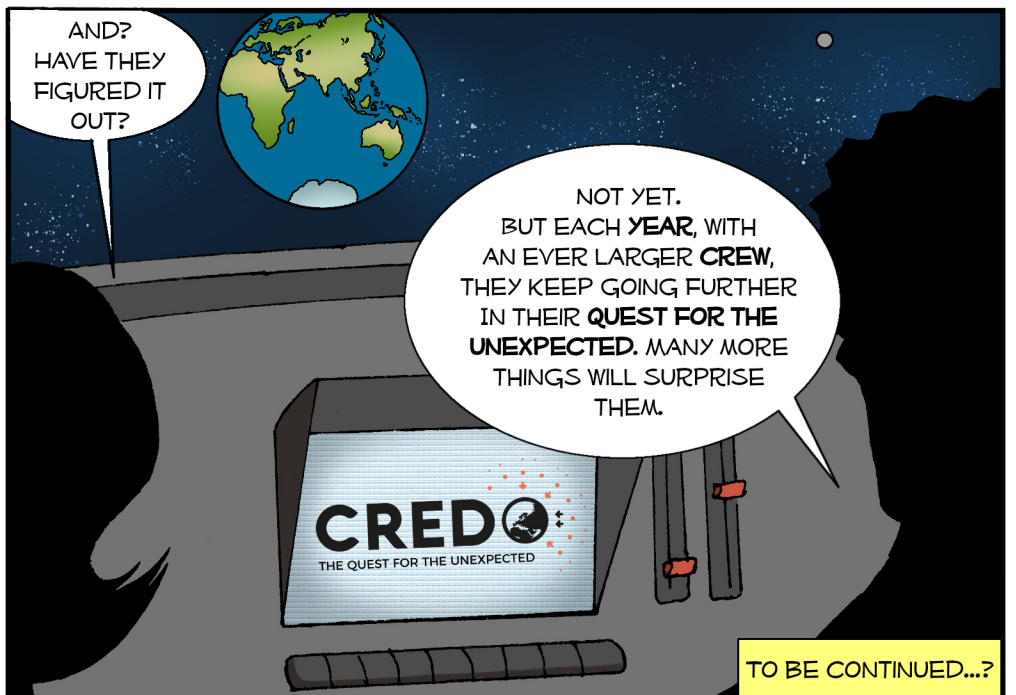
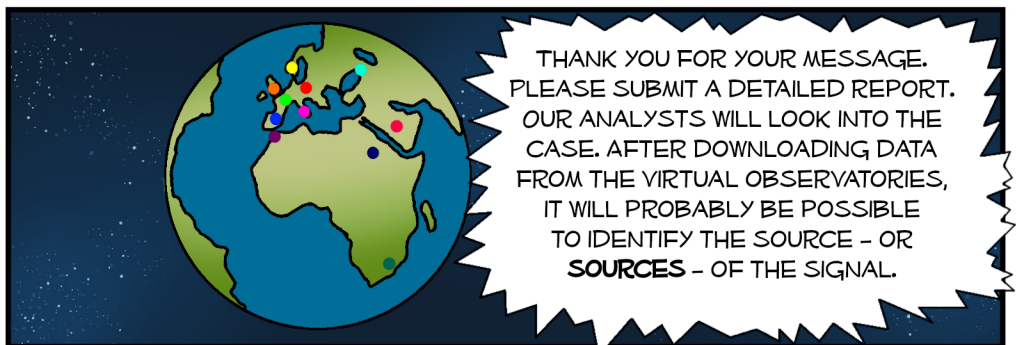
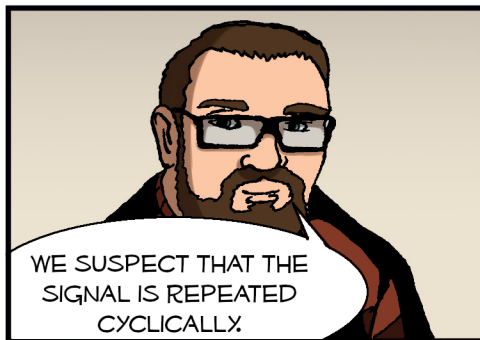
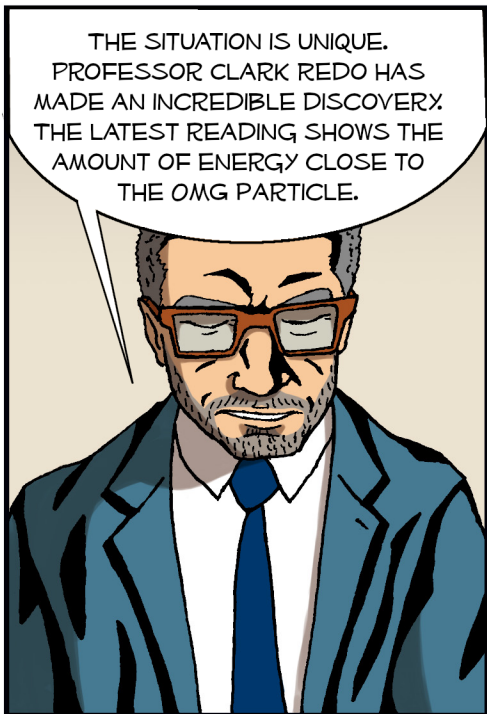
COSMIC RADIATION SURROUNDS US FROM ALL SIDES AND, OF COURSE, IT IS IMPOSSIBLE TO BUILD A DETECTOR THE SIZE OF A PLANET. INSTEAD, WE HAVE CREATED A **DISTRIBUTED OBSERVATORY** SYSTEM - A LARGE NUMBER OF SMALL DETECTORS, SCATTERED ALL OVER THE GLOBE!

CREDO IS AN INTERNATIONAL PROJECT, INVOLVING AS MANY AS 20 COUNTRIES! WE USE A VARIETY OF ADVANCED DETECTORS FOR OUR RESEARCH, AND WE MAY EVEN USE THE CAMERAS OF SMARTPHONES FOR POPULARISATION!











Cosmic Ray Extremely Distributed Observatory **(Ekstremalnie Rozproszone** **Obserwatorium Promieniowania** **Kosmicznego)**

- Cosmic Ray Extremely Distributed Observatory (CREDO, <https://credo.science>) is an international scientific cooperation project with more than 50 institutional members from 20 countries in five continents.
- We conduct pioneering scientific research consisting in the observation and analysis of large-scale phenomena involving cosmic radiation. The most recent of these concern correlations between cosmic radiation and seismic activity which have actually been observed (press release: www.eurekalert.org/news-releases/992637) and which still remain a mystery. The participants of the CREDO Project are working on an explanation.
- We encourage you to join us and become involved in the research: starting your own adventure with cosmic ray detection and even with data analysis does not require specialised training. It is your observations and conclusions that can contribute to solving the riddle of the cosmic-seismic phenomenon!
- We use smartphones as one of the ways to record signals reaching us from space: with the CREDO Detector app, everyone can participate in the detection of secondary cosmic ray particles that leave traces in the covered smartphone cameras.
- We support young people in starting a scientific career by offering internships and topics for engineering, master's, and doctoral theses written under the guidance and with the support of the best specialists from many institutions and universities.
- We organise the "Particle Hunters" competition for schools (but not only!) consisting in team detection of cosmic ray particles with the use of our CREDO Detector app – so that even young kids can join in our collaboration.

