Cloud-Chamber Experiment

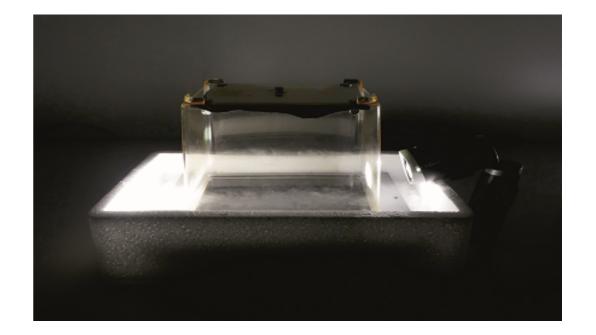
Kim, Erik, Ashwaq, Seraphine, Julian

Setup:

• A cloth soaked with Isopropanol is being held on the top of a closed box. The floor of the box consists out of metal and stands on dry ice to cool the inside of the box down.

Results:

- A thin layer of the Isopropanol forms on the metal floor of the box and fog is spreading all throughout. Thin lines of more intense fog sometimes appeared.
- We saw mostly thin curved lines and as we found out those are created by Beta Radiation



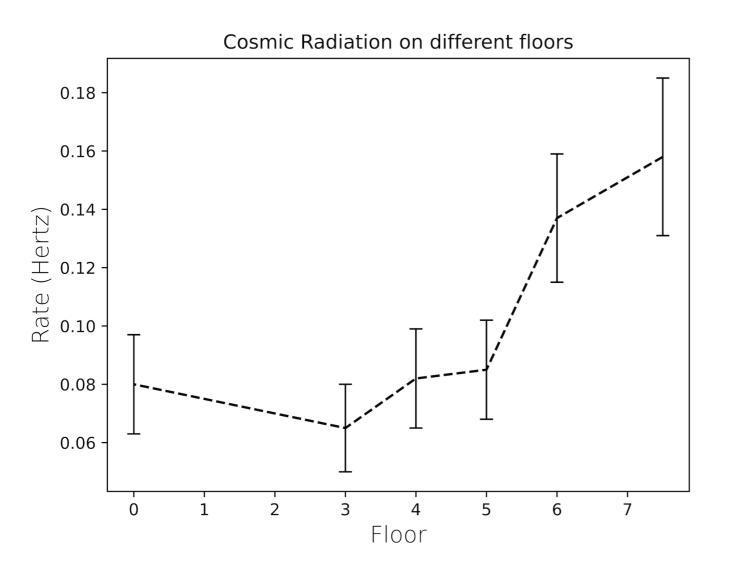


• Sources: desy.de

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Cosmic radiation on different floors

Aaron Poll, Eric Schulz, Nitin Valiamangalam, Daniel Lainer, Ludger Friedl





High altitude energy measurement

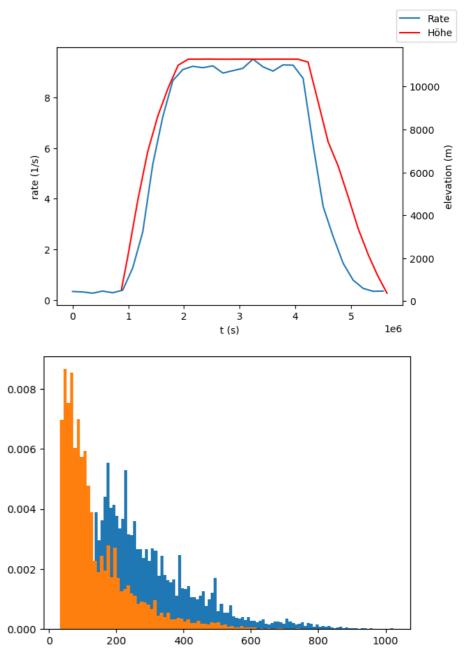
Nils, Georg, Linus, Gesa, Pardis & Martin

x axis = time in seconds y axis (red) = elevation in meters y axis (blue) = rate of particles per second

The greater the altitude, the higher the number of particles per second measured.

x axis (orange) = energy measured on the ground x axis (blue) = energy measured above 1km y axis = times measured

Many particles below 200 energy are measured on the ground. above one kilometer above sea level, mainly particles with energy above 200 are measured. So the higher the altitude the higher the energy of the particles measured.



Angular Distribution of Cosmic Rays

Tilla, Anna, Pia, Johanna, Manja, Leona, Tom, Jason, Kevin, Tom, Fabian

