

The Mean Life of Cosmic Ray Muons

Arnab Bhattacharyya

Partner: Tarun Agarwal

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Presentation Outline

- Historical background on cosmic rays and muons
- Theoretical description of muons and their characteristics
- Experimental Setup
- Results and Error Analysis
- Conclusion

Historical Timeline

- Cosmic rays first investigated by Victor F. Hess in 1912
- Early investigators in 1920s convinced that cosmic rays are high-energy photons
- Experiments by Bothe, Kohlhörster and others during early 1930s reveal cosmic-ray penetration of lead and gold
- Rossi finds two groups of cosmic-ray particles at sea level: penetrating particles and “soft” particles