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Analyzing stereoscopic Cherenkov telescope images from TAIGA array using convolutional neural networks

We use convolutional neural networks (CNNs) to analyze monoscopic and stereoscopic images of extensive air showers registered by Cherenkov telescopes of the TAIGA experiment. The networks are trained and evaluated on Monte-Carlo simulated images to identify the type of the primary particle and to estimate the energy of the gamma rays. We compare the performance of the networks trained on monoscopic and stereoscopic images.

Significance

References

37th International Cosmic Ray Conference (ICRC 2021) https://pos.sissa.it/395/753/pdf

Speaker time zone

Compatible with Europe

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