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Type: **Talk**

## Cosmic ray mass composition study using a Random Forest applied to data from the IceAct telescopes

*Tuesday, 1 February 2022 15:00 (15 minutes)*

The IceAct telescopes are prototype Imaging Air Cherenkov telescopes (IACTs) situated at the IceCube Neutrino Observatory at the geographic South Pole. The IceAct telescopes measure the electromagnetic air shower component of cosmic rays in the atmosphere, which is complementary to the muonic component measured by the IceCube in-ice detector and the particle footprint measured at the surface by IceTop. For this Monte Carlo study a random forest is used to analyze the mass composition of the cosmic rays spectrum using the three independent measurements of the cosmic ray air showers provided by the different detector components.

### Type of Contribution

talk

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