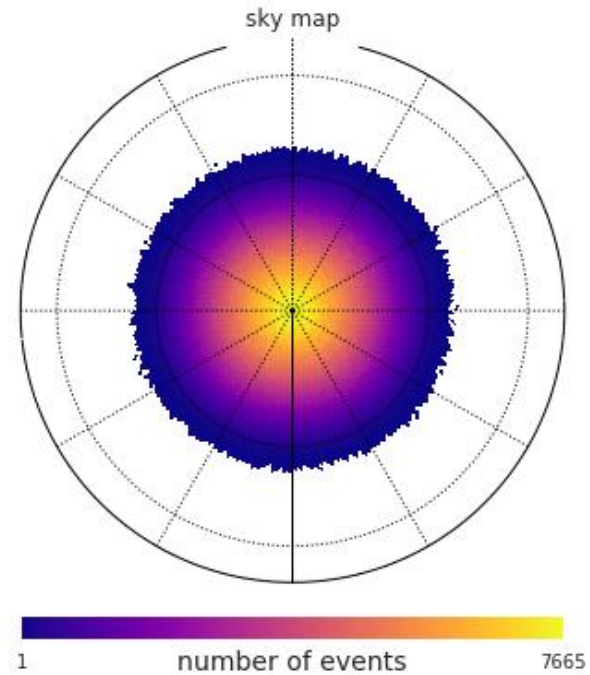


Cosmic Ray Anisotropy at PeV scale

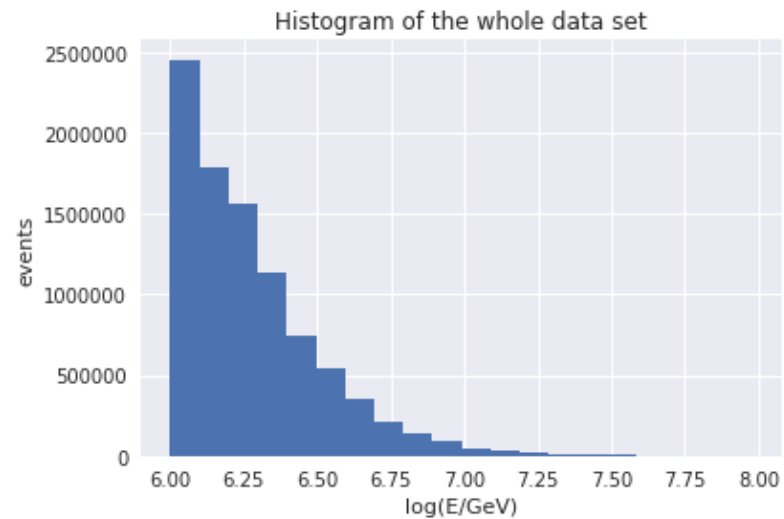
IceCube Bootcamp 2018

Vinzenz Wiedemann

IceTop Data



- 9149516 events
- Energie range: 1 - 95 PeV
- Declination : -52 - 90 deg



Computing the χ^2 -distribution

- Model developed by Abbasi et al.
 - <https://arxiv.org/abs/1802.05003>
 - Create a disc for every map point and compare the event distribution inside to the rest of the sky

- $$\chi^2 = \sum \frac{(\text{events}_{in} - \text{events}_{out})^2}{\text{events}_{out}}$$

- events_{out} are scaled to events_{in}

- Compute p values and σ from that

