



Detection of Small Scale Components in Power Law Spectra

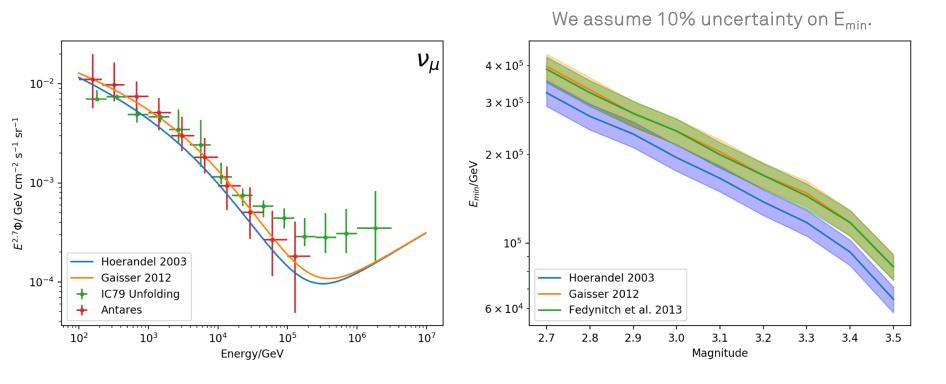
<u>Tim Ruhe</u>, Wolfgang Rhode

International Cosmic Ray Conference 2021 tim.ruhe@tu-dortmund.de





Power Law Spectra and their Minima

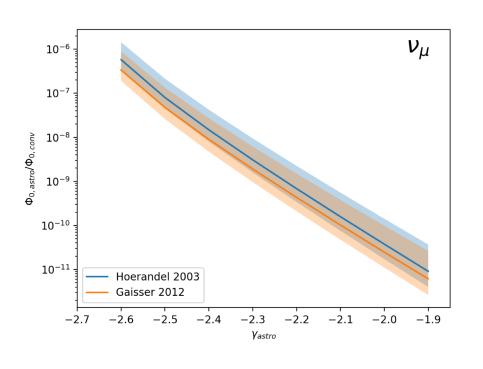


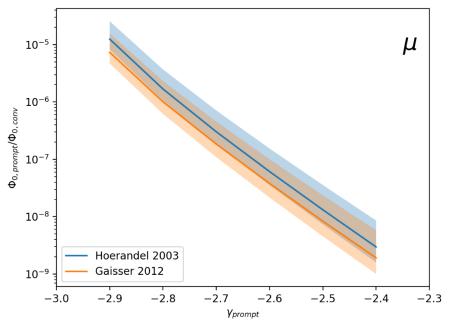
Considering the Minima of energy-weighted lepton spectra, provides valuable information, and might allow to distinguish between different models.





Extraction of Physical Quantities





$$\frac{\Phi_{0,int}}{\Phi_{0,conv}} = E_{min}^{\gamma_{conv} - \gamma_{unkn.}} \frac{(\gamma_{conv} + m)}{-(\gamma_{int} + m)}$$

We assume a 50% uncertainty on E_{min} .