

## Vulcano Workshop 2014 - Frontier Objects in Astrophysics and Particle Physics



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### **Hadronic cross sections in extensive air showers and at accelerators**

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The measurement of the proton-air cross section of hadronic particle production with the Pierre Auger Observatory is reviewed. In this context the relation of the proton-air to the proton-proton cross section is discussed in detail, and the underlying modelling problems of this conversion are highlighted. It is shown, how a combination of accelerator and cosmic-ray measurements could help to resolve these problems.

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