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## **3D Reconstruction of Extensive Air Showers from Fluorescence Data**

### **Abstract content**

A method to reconstruct the 3-dimensional structure of extensive air showers, seen by fluorescence detectors, is described. The observation of the shower is done in 2-dimensional pixels, for consecutive time bins. Time corresponds to a third dimension. Assuming that the cosmic ray shower propagates as a plane wave front moving at the speed of light, a complex 3D volume in space can be associated to each measured charge (per pixel and time bin). The 3D description in space allows a simultaneous access to the longitudinal and lateral profiles of each shower. In case several eyes observe the same shower, the method gives a straight-forward combination of all the information.

### **If this papers is presented for a collaboration, please specify the collaboration**

The Pierre Auger Collaboration

### **Summary**

### **Reference**

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**Session Classification :** Posters 1 + Coffee

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