### 30th International Cosmic Ray Conference



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# In-flight calibration of the GLAST Large Area Telescope calorimeter

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#### **Abstract content**

The Large Area Telescope (LAT) is one of the two instruments onboard the Gamma-ray Large Area Space Telescope (GLAST), the next generation high-energy gamma-ray telescope, to be launched in Fall of 2007. It is comprised of sixteen identical towers in a four by four grid, each tower containing a silicon tracker and a CsI calorimeter that together will give the incident direction of the pair-converting photon and the photon energy. The instrument is covered by an anti-coincidence detector to reject charged particle background. We will present some strategies and methods for calibrating the calorimeter on orbit, including both particle based calibrations, using galactic cosmic rays (GCRs) from H to Fe, and charge injection, that will be necessary to ensure a satisfactory performance of the LAT in its energy range from 20 MeV to more than 300 GeV.

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

on behalf of the GLAST LAT Collaboration

### Summary

## Reference

Proceedings of the 30th International Cosmic Ray Conference; Rogelio Caballero, Juan Carlos D'Olivo, Gustavo Medina-Tanco, Lukas Nellen, Federico A. Sánchez, José F. Valdés-Galicia (eds.); Universidad Nacional Autónoma de México, Mexico City, Mexico, 2008; Vol. 3 (OG part 2), pages 1531-1534

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