



ID de Contribution: 66

Type: **oral presentation**

Antenna development for astroparticles and radioastronomy experiments

jeudi 1 juillet 2010 12:30 (20 minutes)

An active dipole antenna is in operation since five years at Nançay (France) in the CODALEMA experiment. A new version of this active antenna has been developed, whose shape gave its name of 'Butterfly' antenna. Compared to the previous version, this new antenna has been designed to be more efficient at low frequencies, which could permit the detection of atmospheric showers at large distances. Despite a size of only 2x1 meters in each polarization, its sensitivity is excellent in the 30-80 MHz bandwidth. Three antennas in dual polarization were installed on the CODALEMA experiment, and four other have been recently installed on the Auger area in the scope of the AERA project. The main characteristics of the Butterfly antenna will be detailed with an emphasis on its key features which make it a good candidate for the low frequency radioastronomy and the radio detection of transients induced by high energy cosmic rays.

Auteur principal: M. CHARRIER, Didier (SUBATECH, Nantes)

Orateur: M. CHARRIER, Didier (SUBATECH, Nantes)

Classification de Session: Antenna and trigger R&D