



Contribution ID: 192

Type: **Poster presentation**

## Geo-localization in CERN's underground facilities

*Monday, 14 October 2013 15:00 (45 minutes)*

CERN has recently renewed its obsolete VHF firemen's radio network and replaced it by a digital one based on TETRA technology. TETRA already integrates an outdoor GPS localization system, but it appeared essential to look for a solution to also locate TETRA users in CERN's underground facilities.

The system which answers this problematic and which has demonstrated a good resistance to radiation effects, is based on autonomous beacons placed in strategic locations and broadcasting specific identification numbers. The radios are able to decode these identification numbers and transmit this information through the TETRA network to the fire brigade Control Center. An application dedicated to the indoor localization is then able to locate the TETRA terminal on a map.

### Summary

**Primary author:** PASCAL, Aurelie (CERN)

**Presenter:** PASCAL, Aurelie (CERN)

**Session Classification:** Poster presentations

**Track Classification:** Facilities, Production Infrastructures, Networking and Collaborative Tools