

Physics seminar

Tuesday 24th may 2011 at 16h15
(coffee at 16h00)

Belval
Room F0.1

Talk by Dr. German Olivares
Université de Luxembourg

Change Detection Analysis in Geodetic Time Series

Current geodetic time series provide very accurate geodesic and geo-physical data. Nevertheless, with this increasing accuracy new error sources have come up. Offsets were not a big issue some years ago, but now, if left unchecked, they can dominate the error budget of site velocity estimation.

The offsets detection problem could be thought as a case of abrupt change detection (ACD). That theory ascertains that any change within the time series should yield either a change in the statistics or in some parameters for any given statistics thereof.

The first part of this talk will be about the fundamentals of the ACD theory, and a classification of offsets in terms of additive and non-additive changes will be given. In the second part, we will show how several applications of the ACD theory can be used in offsets analysis. Finally, in the third part, some examples of offsets detection in geodetical time series will be introduced.

Next Physics Seminars

- **Tuesday, 14th June 2011:**
Campus Limpertsberg, 16:15
Dominik Berg, UL
“The formation and characterization of kesterite thin film solar cells – challenges and solutions”
- **Tuesday, 28th June 2011:**
Belval, 16:15
Prof. Dr. M. Farle, U Duisburg-Essen
“Influence of nanoparticle shapes and morphologies on magnetic hardness”