

# 96th Journées Luxembourgeoises de Géodynamique (JLG)

---- October 24-26, 2011 ----

## - SCIENTIFIC PROGRAM -

*last updated: 6 October 2011*

### Monday October 24

09:00 – 10:00 Registration, Welcome

#### **Morning session**

10:00 – 10:40 Ruch, J., V. Acocella, N. Geshi, A. Nobile and F. Corbi  
*Kinematic analysis of vertical collapse at volcanoes using analogue model time series*

10:40 – 11:20 Kervyn, M. and A. Delcamp  
*How unstable are volcanoes? Gravity-induced deformation at African volcanoes*

11:20 – 12:00 Vye, C., B. Napier, K. Smith, S. Medynski and T. Wright  
*High-resolution 3D derivation of volcanic architecture in Afar, Ethiopia*

**12:00 – 13:30 Lunch**

#### **Afternoon session 1**

13:30 – 14:10 Samsonov, S.V. and N. d'Oreye  
*Multidimensional time series analysis of ground deformation from SAR data acquired in various orbital geometries*

14:10 – 14:50 Wauthier, C., V. Cayol, F. Kervyn and N. d'Oreye  
*Nyiragongo volcano eruption, 2002, as constrained by multibeam InSAR data*

14:50 – 15:30 Smets, B., F. Kervyn and N. d'Oreye  
*New insights into the geodynamic framework of the western part of the Virunga Volcanic Province*

**15:30 – 16:00 Coffee Break and Poster Session**

## Afternoon session 2

- 16:00 – 16:40 Gonzalez, P.J.  
*Volcanic ground deformation signatures in Canary Islands and Hawaii*
- 16:40 – 17:20 Li, Z., W. Hammond, G. Blewitt, C. Kreemer and H.-P. Plag  
*Vertical tectonic signals from integrated InSAR and GPS, Southern Walker Lane and Sierra Nevada, Western U.S.*
- 17:20 – 18:00 Heleno, S. et al.  
*Persistent Scatterers Interferometry detects and measures ground subsidence in Lisbon*

## Tuesday October 25

### Morning session

- 09:00 – 09:40 Oyen, A., A. Hooper and M. King  
*The contribution of InSAR towards measuring GIA in the Antarctic Peninsula*
- 09:40 – 10:20 Sansosti, E.  
*The impact of second generation SAR sensors on the deformation time series analysis via DInSAR techniques: the COSMO-SkyMed study case*
- 10:20 – 10:40 Coffee Break and Poster Session**
- 10:40 – 11:20 Derauw, D.  
*Split Band SAR Interferometry: Theory and potential applications*
- 11:20 – 12:00 Benavent, M., J. Arnosó and J.G. Montesinos  
*ECOM: New software for ocean tide loading computation*
- 12:00 – 12:15 Short presentations of posters (5 min each)**
- 12:15 – 13:00 Lunch**

### Afternoon session 1

- 13:00 – 13:40 Cotton, F.  
*The challenge of ground-motion prediction in low seismicity areas*
- 13:40 – 14:20 Bindi, D., S. Parolai and A. Oth  
*Seismic hazard assessment in Central Asia*
- 14:20 – 15:00 Sokolov, V. and F. Wenzel  
*On the modeling of strong ground motion distribution in probabilistic seismic hazard assessment and loss estimation*
- 15:00 – 15:25 Coffee Break and Poster Session**

## Afternoon session 2

- 15:25 – 15:40 Sokolov, V.  
*Impressions from the giant Tohoku earthquake as perceived in Tokyo*
- 15:40 – 16:20 Hooper, A., J. Pietrzak, W. Simons, H. Cui, R. Riva and M. Naeiji  
*The Mw=9.0 Tohoku-Oki earthquake – could we have foreseen it? Evidence from a multi-disciplinary analysis*
- 16:20 – 17:00 Satriano, C., J.-P. Vilotte and P. Bernard  
*Multi-scale imaging of the 2011 great Tohoku earthquake using seismic antenna techniques*
- 17:30 – 19:00 **Guided tour of “A Possen” – Folklore and Viticulture Museum**
- 19:00 – 23:00 **Official Dinner of the JLG 2011**

## Wednesday October 26

### Morning session

- 09:00 – 09:40 Lancieri, M., R. Madariaga and L.-F. Bonilla  
*Spectral scaling of the aftershocks of the Tocopilla 2007 earthquake in Northern Chile*
- 09:40 – 10:20 Ktenidou, O.-J., S. Arnaouti, C. Gelis and L.-F. Bonilla  
*Some factors of uncertainty in the estimation of  $\kappa$  – application to Aegion, Greece*
- 10:20 – 10:40 **Coffee Break and Poster Session**
- 10:40 – 11:20 Oth, A. and D. Bindi  
*On the sources of variability in ground-motion prediction equations: a regression analysis of KiK-net data in Japan*
- 11:20 – 12:00 **Closing session**
- 12:00 – 14:00 **Lunch**
- 14:00 – **Departure of participants**

## POSTERS

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| 01 | <u>Smets, B., F. Kervyn and N. d'Oreye</u>                               | <i>Nyiragongo volcano (North Kivu, DRC): 3D modelling and monitoring of the main crater</i>  |
| 02 | <u>Alipour, S., K. Tiampo, S. Samsonov and P. Gonzalez</u>               | <i>Creep rate estimation and modeling of slip distribution along Hayward Fault using polarimetric SAR interferometry</i>               |
| 03 | <u>Ross, K.A., M. De Batist, F.S. Anselmetti, M. Schmid and A. Wüest</u> | <i>Mapping Lake Kivu's Northern Basin: A manifestation of seismic stratigraphy and high resolution bathymetry for a 3D perspective</i> |