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2014

I-DUST

ADVANCING KNOWLEDGE & INSTRUMENTATION
SOLID EARTH, ATMOSPHERE & NEAR UNIVERSE

5TH INTERNATIONAL CONFERENCE : I-DUST 

MAY 5-7TH 2014

WITH CASTEL LUBERON
INTERCOMMUNITY OF APT - FRANCE

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i-DUST 2014 SCIENTIFIC PROGRAM
Castel-Luberon resort- APT - FRANCE - 05-07 May 2014

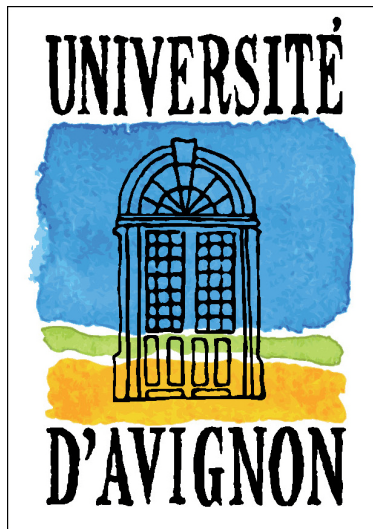
Invited talks: 40' – Contributed talks: 20'

Monday May 5, 2014	Tuesday, May 6, 2014	Wednesday, May 7, 2014
08:30 Arrival of participants Registration, coffee	09:00 Session II Rare events physics	09:00 Session IV Noise as a signal
10:00 Welcome by Mairie d'Apt <i>Jean-Pierre Cohen-Coudar, 5th Adjoint</i> 10:20 <i>i</i> -DUST opening and welcome <i>Stéphane Gaffet, director of LSBB</i> 10:50 Large excavations and multi-disciplinary studies in deep underground laboratories <i>Joseph S.Y. Wang, LBNL, Berkeley, USA</i>	<ul style="list-style-type: none"> • (Invited talk) Phase III (and maybe IV) of the SIMPLE dark matter search experiment at the LSBB <i>Tom Girard, Univ. Lisbon, PRT</i> • Neutron spectrometry for inter-disciplinary research at LSBB <i>Véronique Lacoste, IRSN, FRA</i> • Muon telescope based on micromegas detectors; from design to data acquisition <i>Ignacio Lázaro Roche, LSBB, FRA</i> • Muon tomography using a new technology: micromegas detectors in a TPC design <i>Fanny Hivert, LSBB, FRA</i> 	<ul style="list-style-type: none"> • (Invited talk) Quantum electrical metrology: fundamental constants of physics, practical units and instrumental challenges <i>Wilfrid Poirier, LNE, FRA</i> • A short baseline strainmeter using fiber-optic bragg-grating (FBG) sensor and a SWIFTS interferometer <i>Mikhael de Mengin, IPAG, UJF/CNRS, FRA</i> • Interactivity between integrated circuits and MEMS sensors for wireless networks <i>Stéphane Meillère, IM2NP, FRA</i>
11:30 Session I Critical zone Geological reservoirs	10:40 COFFEE BREAK	10:20 COFFEE BREAK
<ul style="list-style-type: none"> • (Invited talk) The Urganian limestones in South-East France: strategy of characterization of a reservoir analogue <i>Gérard Massonnat, TOTAL, FRA</i> 	11:10 Session II (continued)	10:50 Session IV (continued)
12:30 LUNCH	<ul style="list-style-type: none"> • Low-noise underground environment to investigate the atmospheric muon impact on the single event effect sensitivity of nano-scales CMOS technologies <i>Pierre Li Cavoli, ONERA, FRA</i> • The Matter-wave laser Interferometer Gravitation Antenna (MIGA) <i>Philippe Bouyer, LP2N, FRA</i> • The Matter-wave laser Interferometer Gravitation Antenna (MIGA): new perspectives for fundamental physics and geosciences <i>Benjamin Canuel, LP2N, FRA</i> 	<ul style="list-style-type: none"> • (Invited talk) Investigation of Low Frequency Noise in MEMS Resistive Smart Sensor for Wireless Sportive Activity and Health Monitoring <i>Wenceslas Rahajandraibe, IM2NP, FRA</i> • Closing speech by the Mairie de Rustrel Closing speech by the intercommunity of Apt, Pays de Vaucluse et Pont Julien
14H00: Session I (continued)	12:30 LUNCH	12:30 LUNCH
<ul style="list-style-type: none"> • Geophysical investigations at the LSBB <i>Guy Sénéchal, Univ. Pau, FRA</i> • Predicting hydraulic, mechanical and seismic properties of carbonates <i>Yves Guglielmi, Univ. Aix-Marseille, FRA</i> • Hydrogeophysical study of structure and functioning of the karst unsaturated zone <i>Konstantinos Chalikakis, Univ. Avignon, FRA</i> • Imaging the LSBB environment from GPR data, along the tunnel and from the surface <i>Guy Sénéchal, Univ. Pau, FRA</i> 	14:00 Session III Couplings: solid Earth, atmosphere and near Universe	13:30 Topical meetings
15:20 COFFEE BREAK	<ul style="list-style-type: none"> • (Invited talk) Sprite observations from Vestale on the Plateau d'Albion <i>Martin Fullekrug, Univ. Bath, GBR</i> • An overview of recent [SQUID]² activities <i>Elizabeth Pozzo di Borgo, Univ. Avignon, FRA</i> • Observation of lightning-induced signals on the summit of la grande montagne: part 1 – HF measurements <i>Ivana Kolmasova, Inst. Atm. Physics, CZE</i> • Observation of lightning-induced signals on the summit of la grande montagne: part 2 – interferometry and VLF measurements <i>Ondrej Santolik, Inst. Atm. Physics, CZE</i> 	<ul style="list-style-type: none"> • International network of advanced magnetometry: areas of interest, interchange of magnetometer data, scientific proposal • Open to other topical meetings
15:50 Session I (continued)	15:40 COFFEE BREAK	15:00 COFFEE BREAK
<ul style="list-style-type: none"> • Optical borehole seismic experience with heterodyne distributed vibration sensing <i>Bernard Frignet, Schlumberger, FRA</i> • Interaction of seismic waves with the surface topography: a new proxy to infer topographic amplification and ground-motion variability <i>Emeline Maufray, Univ. Grenoble Alpes, FRA</i> • On the use of optical tiltmeters and seismometers for a better determination of strain and displacement at depth <i>Frédéric Boudin, Univ. Montpellier, FRA</i> 	16:10 Session III (continued)	15:30 Visits and dinner To be organized during i-DUST
20:00 CONFERENCE DINNER	<ul style="list-style-type: none"> • Towards automated remote SQUID stations for geomagnetic measurements <i>Danie Gouws, SANSA, ZAF</i> • Correlation between fluxgate and SQUID magnetometer data-sets for geomagnetic storms: Hermanus <i>Elda Saunderson, SANSA, ZAF</i> • Monitoring geomagnetic signals of groundwater movement using multiple underground SQUID magnetometers <i>Samuel Henry, Univ. Oxford, GBR</i> 	<ul style="list-style-type: none"> • Visits of LSBB, LSBB Vestale, Petit Colorado, and/or Fontaine-de-Vaucluse • Closing dinner or picnic
	20:00 Free dinner	

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