



19<sup>TH</sup>

CARIBBEAN GEOLOGICAL CONFERENCE 2011

Le Gosier - Guadeloupe - French West Indies

## 19<sup>th</sup> CARIBBEAN GEOLOGICAL CONFERENCE

Le Gosier, Guadeloupe, France

March 21<sup>st</sup> to March 24<sup>th</sup> 2011

### Third Circular

The 19<sup>th</sup> Caribbean Geological Conference will be held in Le Gosier, Guadeloupe, in the Eastern Caribbean, from March the 21<sup>st</sup> to March the 24<sup>th</sup> 2011, under the auspices of the *Université Antilles-Guyane* and the *IUFM de Guadeloupe*. It is organized by the members of the *Laboratoire de Recherche en Géosciences et Energie*.

All informations and news can be found on the conference web site, at this, only this, address:

<http://www.univ-ag.fr/cgc2011/>

The conference aims to put together the actors of Geosciences working within inter-tropical Americas so that they can present their work and share their points of view. The Conference is dedicated to the exchange of information on all aspects of Caribbean Geology.

All attendants are suggested to check for visa requirements in Guadeloupe, even those who already have a valid stay permit for mainland France.

### CORRESPONDENCE

All communications should be addressed to: [cgc2011@univ-ag.fr](mailto:cgc2011@univ-ag.fr)

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## REGISTRATION FEES

Participants	200€
Students	120€

Registration fees cover the costs of Welcome diner (Monday), lunches (Tuesday, Wednesday and Thursday), coffee breaks, as well as programs and final transactions. Refunds of pre-registration fees will be made for cancellations done before February 28, 2011.

The fees are payable online by credit card via the conference web site:  
<http://www.univ-ag.fr/cgc2011/>

It is also possible to pay by bank transfer on this account :

**RIB: 10071 97100 00001006912 51 - TPBASSETERRE**

**IBAN: FR76 1007 1971 0000 0010 0691 251**

**BIC: BDFEFRPPXXX**

Please reference the transfer as follow: **CGC2011VOTRENOM**

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## CONFERENCE SITE AND FACILITIES

The Conference will be held at Salako hotel ([http://www.karibea.com/guadeloupe/hotel\\_gosier.php](http://www.karibea.com/guadeloupe/hotel_gosier.php)) in Le Gosier, near Pointe à Pitre. Modern presentation facilities will be available in each conference room. Simultaneous sessions will be held in two different rooms. A dedicated space near the conference rooms will be allocated for Poster sessions.

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### Visa and currency:

The currency in Guadeloupe is the Euro.

Attendees coming to the conference and accompanying persons should check with their travel agent or the French embassy for visa requirements.

Embassy and Visa informations for Guadeloupe F.W.I.:

<http://www.diplomatie.gouv.fr/en/>

➔ Going to France

**Important :** People already having a Schengen visa need a specific visa for Guadeloupe as the department is out of the Schengen convention territory. Please ask for a *Département d'Outre Mer (DOM) – Guadeloupe – visa* at the French embassy.

Invitation letters can be provided by the organizing committee upon request.

In case of visa problem, please contact the organizing committee ([cgc2011@univ-ag.fr](mailto:cgc2011@univ-ag.fr)).

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## **ACCOMMODATION**

Hotel room at negotiated rates are available in the following hotels, at or near the conference center. Other possibilities are also available in Le Gosier. **All participants are invited to book a room.** The conference site is the Salako hotel, which is part of the Karibea complex, but the other hotels are very close.

### **Canella Beach (\*\*\*)**

A limited number of rooms at the following prices, per room and per night, are dedicated to the conference :

- single room with breakfast and tax included : 77 euros
- double room with breakfast and tax included : 102 euros

Booking is via e-mail at this address:

[reservation@canellabeach.com](mailto:reservation@canellabeach.com), use the code : **conférence géologie**.

### **KARIBEA complex**

A limited number of rooms at the following prices, per room and per night, are dedicated to the conference in the hotels of the complex :

### **SALAKO HOTEL (\*\*\*)**

- single room with breakfast and tax included : 95 euros
- double room with breakfast and tax included : 107 euros
- triple room with breakfast and tax included : 120 euros

### **PRAO HOTEL : (\*\*\*) and small appartments**

- single room with breakfast and tax included : 115 euros
- double room with breakfast and tax included : 126 euros
- triple room with breakfast and tax included : 140 euros

Booking is via e-mail at this address:

[chadek@orange.fr](mailto:chadek@orange.fr), use the code: **conférence géologie**.

Other hotels at close distance from the conference site. Their prices are not negotiated and are indicative.

**CREOLE BEACH AND SPA \*\*\*\***

100m from site

Single room: 175 € /pers/night

Double room: 110 € /pers/night

Breakfast included

<http://www.creolebeach.com>

**KARAIBES HOTEL \*\***

100m from site

Single room: 70 € /pers/night

Double room: 35 € /pers/night

Breakfast not included

<http://karaibes.hotel.pagesperso-orange.fr/>

**LA FORMULE ECONOMIQUE**

800m from site

Single room: 70 € /pers/night

Double room: 35 € /pers/night

Breakfast not included

<http://www.laformuleeconomique.com>

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**Travel:**

The main gate for Guadeloupe is *Pôle Caraïbe* airport (<http://www.guadeloupe.aeroport.fr/>). IATA code is PTP. Several companies fly to Guadeloupe from all over the Caribbean, north America and Europe (Air Antilles express, Air Canada, Air Caraïbes, American Eagle, Air France, Corsair, Liat, Tropic Airlines, Air Italy, Neos, Wes Jet).

It is also possible to come by ferry-boat from Antigua, Dominica and Martinique.

From the airport, the Salako Hotel at Pointe de la Verdure, is at around 15min/30 euros by taxi. A less expensive shuttle transportation will be appointed, please let us know at this address « [chadek@orange.fr](mailto:chadek@orange.fr) » if you want to benefit from it.

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## **FIELD TRIPS**

All field trips will departure from the conference site (Hotel Le Salako, Pointe de la Verdure, Le Gosier). Return will be at the same site. Participants are invited to book a room at the hotel for the return if needed. Four field trips are proposed. Three are in Guadeloupe (Grande-Terre and Basse-Terre) and one is in La Désirade island, 45 minutes by boat from Guadeloupe. The number of attendants is limited to 30 for each trip. Flyers presenting the trips are downloadable on the conference web site (<http://www.univ-ag.fr/cgc2011/>). For all excursions, attendants shall come with sun protection (suncream, solar glasses, hat...), good shoes and water, as well as the usual field gear.

Registration for the field trips is online only, via credit card, on the conference web site (<http://www.univ-ag.fr/cgc2011/>).

#1- Grande-Terre Geology: 1 day - march 25th

Leader - Dr LETICEE Jean Len

Cost: 50€ - includes lunch and transportation

This trip will provide a broad overview of the architecture and evolution of the Grande-Terre carbonate platform during the Plio-Pleistocene.

#2 – La Désirade: 2 days - march 25-26th

Leaders - Dr Jean-Jacques Cornée, Pr Jean-Marc Lardeaux

Cost: 150€ includes meals, accomodation and transportation (by bus and round trip boat to La Désirade island).

La Désirade island holds key outcrops for the history of the Caribbean. The first day will focus on the ophiolite series, its metamorphism and deformation. The second day will be dedicated to the carbonate platform and its paleontology.

#3 – La Basse-Terre Geology 2days - March 25-26th

Leaders- Dr Georges Boudon

Cost: 150€ includes meals, accomodation and transportation.

During this two days trip, attendants will be presented the volcanic formations of the Basse-Terre island, the highly monitored *La Soufrière* active volcano and its natural hazards.

For the summit part of the volcano, the weather can be rainy and cold (altitude: 1496 m) so you need to have warm clothes, raincoat and walking boots, but also suncream and hat.

#4 – Geothermal activity in Basse-Terre: 1 day - March 25th

Leader- Dr Erwan Bourdon

Cost: 50€ - includes lunch and transportation

During this field trip we will describe the geological formations of Bouillante massif, hosts of the high enthalpy geothermal field (hot springs) of Bouillante and outline our present day knowledge of the field reservoir. a visit of Bouillante geothermal plant will possibly occurs depending on access possibility to the production site.

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## **PROGRAM**

Oral presentations : 15 minutes maximum (10 minutes recommended), followed by 5 minutes of questions. The conference rooms will be furnished with videoprojection devices and computers (Windows 98/2000, XP Pro). The chairmens will collect all the presentations 15 minutes before the beginning of the sessions. It is asked to the speakers to add a picture of them to their first slide, and to repeat the presenting slide in the end of their presentation.

Poster spacing is suitable for oversize A0 (90cm width x 120cm height). Presenting authors are expected to install their posters before the first session and to be along with it during the dedicated poster session. Posters will be displayed in the room « Ananas ».

Two public conferences are also scheduled. The first one, Tuesday 22 in the evening is dedicated to tsunamis and the Caribbean tsunami simulation “Caribe Wave 2011”, that will take place the same day. The second one, Thursday 24 afternoon, is targeted for the general audience of Guadeloupe and especially the high school teachers. The second conference will take place at the University (5 minutes shuttle from the conference site), in parallel of the workshops.

### **MONDAY MARCH 21<sup>st</sup>**

Welcome ceremony.

Intervention of Mr Laurent Dever, Chancellor of the Universities, Rector of the Academy of Guadeloupe, on the general theme of hydrogeology.

Registration (room “Mandarine”)

## **TUESDAY MARCH 22<sup>st</sup>**

### **Room 1- “Maracuja”**

#### **Session: Cenozoic carbonate systems**

- 8:00 Geomorphology and sediment dynamics in mesophotic coral ecosystems of the upper insular slope of southwest Puerto Rico (C. Sherman)
- 8:20 Stratigraphy, sedimentology, and Pliocene-Pleistocene evolution of the southeastern part of the Dominican Republic. Tectonics, eustasy and climate controls. (E. Lasseur)
- 8:40 Stratigraphy of the White Limestone of Jamaica (S.F. Mitchell)
- 9:00 Ecology and zonation of coral build-ups in the Late Miocene August Town Formation, Jamaica (T.A. Stemann)
- 9:20 Tectono-stratigraphic development of Southeastern Jamaica (S. A. James-Williamson)
- 9:40 Pleistocene Infilling of Guadeloupean Caves (A. Lenoble)

#### **Coffee break**

- 10:30 Sedimentology and paleoenvironments of the Pliocene-Pleistocene carbonate platform of Grande-Terre (Guadeloupe, Lesser Antilles forearc) (J.J. Cornée)
- 10:50 Tectonostratigraphy of the Pliocene-Pleistocene carbonate platforms of the Guadeloupe Archipelago, Lesser Antilles fore-arc (P. Munch)
- 11:10  $^{87}\text{Sr}/^{86}\text{Sr}$ -ratios, foraminifera and sedimentology of the Late Miocene – Pliocene cyclic carbonates of La Désirade (Guadeloupe, France) (P.J.N. Weber)
- 11:30 Pliocene-Pleistocene fore-arc vertical motion recorded at Karukera Spur, (Lesser Antilles) (L. de Min)
- 11:50 Architecture of Offshore Carbonate Plateform (Guadeloupe Archipelago - Lesser Antilles Forearc) (J.F. Lebrun)

From 12:10 to  
13:30

#### **Lunch**

#### **Session: Geosciences education and Geodiversity**

- 13:30 Séismes vécus: 2 films court-métrages relatent des expériences croisées sur Les Saintes (2005) et l'Aquila (2009) (P-M Sarant)
- 13:50 Actions towards seismic risk mitigation in Martinique, French Antilles (J.C Audru)

- 14:10 Tuned in to the Earth from the classroom with ‘Sismos à l’Ecole’ the french educational seismological network (J.L. Berenguer)
- 14:30 Teaching Geology in the French West Indies. From scientific results to pupil’s conceptions (Y. Mazabraud)
- 14:50 Les représentations d’élèves de Guadeloupe sur la géothermie. Relation entre connaissances scientifique et opinions (T. Forissier)
- 15:10 The changing role of the UWI Geology Museum: from repository to an interactive learning environment (S. A. James-Williamson)
- 15:30 Patrimoine Géologique de la Guyane : une démarche d’inventaire et de valorisation en cours de réalisation (P. Lecomte)
- 15:50 Géodiversité, inventaire et protection en Caraïbe : le cas de la Guadeloupe, département français d’Amérique (L. Legendre)

From 16:30 to  
18:30

### **Coffee break and poster session**

- Posters**
- Inventory of the geological heritage of France’s Overseas Departments: the Guadeloupe and Martinique example (A. V. Barras)
  - The accumulation of Quaternary anthozoa (Scleractinia) in St-Félix (Guadeloupe, Grande-Terre) – proposal of protection (R. Tarkowski)
  - Le risque sismique en Guadeloupe : conceptions d’élèves (G. Louisy-Louis)
  - Régime thermique karsts (A. Queffelec)
  - Late Miocene-Early Pliocene Larger Foraminifera of La Désirade (Guadeloupe, France) (C. Baumgartner-Mora)
- Session:** **General Geology**
- Posters**
- Reproducing phyllosilicate textures found in the fine-grained matrices of the CM2 carbonaceous chondrites (L. J. Chizmadia)
  - Understanding temperature and pH conditions during aqueous alteration of the CM2 carbonaceous chondrites (S. A. Lebrón-Rivera)
  - Minéralisations uranifères liées aux dépôts gréseux du Dévonien Inférieur du Bassin de Tin Seririne Oua N’Ahaggar, Hoggar, Algérie (A. Ould Hamou)
  - Biostratigraphy and Lithostratigraphy of the Middle and Late Jurassic Rocks West of Binalud Range Northwest of Neyshabour, Northeast of Iran (F. Dabbaghisadr)

## **Room 2 – “Goyave”**

### **Session: Hydrogeology - Water resources monitoring**

- 8:00 Identification of infiltration and run-off areas with the River's network Persistence and Development Index (IDPR): applications in Basse-Terre Island and in Martinique (A. Dumon)
- 8:20 New elements toward hydrogeological schemes of Martinique aquifers (B. Vittecoq)
- 8:40 Prospections hydrogéologiques en milieu volcanique. Etude de cas : Cœur Bouliké, commune de Saint-Joseph, Martinique (L. Arnaud)
- 9:00 Diphasic hydrodynamic modeling of the Grande-Terre groundwater flows (Guadeloupe) (A. Dumon)

### **Session: Geothermy**

- 9:20 The High-Temperature Geothermal System of Bouillante (Guadeloupe, French West Indies) (V. Bouchot)
- 9:40 Modeling of Bouillante geothermal field (Guadeloupe, French Lesser Antilles) (S. Lopez)

### **Coffee break**

- 10:30 Contribution of multi-methods geophysics to improve the regional knowledge of Bouillante geothermal Province (Guadeloupe) (L. Gailler)
- 10:50 The use of Magnetotelluric and Time domain electromagnetic methods in the geothermal survey of Montserrat, W.I. (G.A. Ryan)
- 11:10 Comparison of the fluid geochemical signatures between the hydrothermal systems of Bouillante and Soufrière (Guadeloupe, French West Indies) (B. Sanjuan)
- 11:30 A 3D Structural Model to Merge Onshore and Offshore Geological Knowledge in the Bouillante Geothermal Province (French West Indies) (P. Calcagno)
- 11:50 On site experiments about silica deposition and kinetics data during the cooling of the Bouillante geothermal fluids (Guadeloupe, French West Indies) (C. Dixit)

From 12:10 to  
13:30

### **Lunch**

Session: **Applied Geology**

- 13:30 Sequence stratigraphic and geodynamic interactions in the Northern Cuba Basin : a multidisciplinary approach (N. Harvey)
- 13:50 Estimation of undiscovered conventional oil/gas resources of the Barbados accretionary prism (C.J. Schenk)
- 14:10 Projet pilote de la cartographie géotechnique de la zone de Frères à Port-au-Prince (J-F Thimus)
- 14:30 Seismic microzonations of municipalities in French West Indies (E. Vanoudheusden)
- 14:50 Comportement mécanique et rhéologique du sol de la formation géologique "Morne Delmas" en Haïti (K. Guerrier)
- 15:10 3D resistivity mapping of volcanic islands (P. Nehlig)
- 15:30 Evolution et dynamique du trait de côte de l'archipel de la Guadeloupe de 1956 à 2004 (L. Ducreux)
- 15:50 Public Policy in Groundwater: Far from the Rhetoric, Closer to the Reality (H. Martinez)

From 16:30 to  
18:30

**Coffee break and poster session**

Posters

- Études mathématiques et numériques pour la modélisation des systèmes hydrothermaux - Applications à la géothermie (C. Copol)
- Occurrence of epithermal breccias in the Bouillante geothermal field (Basse Terre – Guadeloupe) - Part 1 (P. Patrier)
- First Ar-Ar dating of the high temperature epithermal breccias in the Bouillante geothermal field (Guadeloupe, French West Indies) – Part 2 (C. Vérati)
- Map of Mineral Resources in the Dominican Republic (E. Lopera)

Carbon Capture and Storage – example from Poland (R. Tarkowski)

Mitigación de Potencial Conflicto entre Departamentos Colombianos por los Planes Departamentales de Aguas: Lejos de la Retórica, Más Cerca de la Realidad (H. Martinez)

Desarrollo de los estudios geotécnicos y el Servicio Geológico Nacional en República Dominicana (S. J. Muñoz Tapia)

Atlas por provincias del potencial geológico-minero de la República Dominicana (J. Rodríguez-Reyes)

Etat des connaissances sur le Lac Azuei ou Etang Saumâtre (Haïti). Importance écologique de cette ressource hydrique. (Marie Gisèle P.A. Pierre)

Mineralogical and geotechnical characterization of dredged sediments from the canal Bois-de-Chêne (Port-au-Prince, Haiti) (Wolffield Tingué)

## **WEDNESDAY MARCH 23<sup>rd</sup>**

### **Room 1- “Maracuja”**

#### **Session: Petro-geochemistry and History of the Caribbean**

8:00 The Caribbean domain by the late Palaeozoic time (M. Villeneuve)

8:20 Is the Beata Ridge the cause of the bending of the structures in Central Hispaniola? (The Hispaniola Swing) (S. Brouwer)

8:40 La Sierra Nevada de Santa Marta y la Serranía de Perijá, Colombia y Venezuela: ¿Son resultado de la convergencia entre la placa Caribe y el margen suramericano durante el Neógeno Superior? (G. Chicangana)

9:00 The Ocean Drilling Program around the Caribbean Sea (S. Radford)

9:20 Late Cretaceous pelagic and arc-derived sedimentation in the S-Nicoya Peninsula, Costa Rica (G. Andjic)

9:40 Early Jurassic alkaline basalts in the Santa Rosa Accretionary Complex (Santa Elena, Costa Rica): Petit spot volcanism within an old pacific plate (P.O. Baumgartner)

### **Coffee break**

#### **Session: Petro-geochemistry and History of the Caribbean**

10:30 Mesozoic Ribbon Radiolarites of the Caribbean Plate: Remnants of Pacific Ocean Floor (P.O. Baumgartner)

10:50 Discovery of Lower Cretaceous syn-metamorphic thrust tectonics in French Lesser Antilles (La Désirade Island, Guadeloupe): Implications for Caribbean geodynamics (J.M. Lardeaux)

11:10 New radiometric ages for the basement of La Desirade Island (Guadeloupe, Lesser Antilles) (C. Vérati)

11:30 New constraints on the tectonostratigraphy, geochemistry and radiometric ages of the Panamanian Cretaceous – Paleogene volcanic arc (I. Corral)

11:50 Paleomagnetic study of cretaceous arc terranes in central Hispaniola: Paleogeographic Implications (K. Glaccum)

12:10 Thermotectonic history of metamorphic rocks in the Blue Mountain inlier, Jamaica (R. N. Abbott)

From 12:30 to

14:00

### **Lunch**

#### **Session: Petro-geochemistry and History of the Caribbean**

- 14:00 Cr-spinel composition and platinum-group minerals from placer deposits associated with ultramafic-mafic intrusives in the Loma de Cabrera batholith, Dominican Republic: Comparison with ophiolites and Alaskan-type complexes: a preliminary report (J. F. Lewis)
- 14:20 Early Cretaceous arc formation and crustal inheritance in central Cuba: geochemistry and age of the Los Pasos Formation (Rojas-Agramonte)
- 14:40 Fragments of a mantle plume in northern Dominican Republic: Garnet-ultramafic rocks in the Rio San Juan complex (R. N. Abbott)
- 15:00 Petrologic and Geochemical study of Culebra's Eastern Cays: Cayo Norte and Culebrita, Puerto Rico (T. N. Ufret)
- 15:20 Co mineralization in the Falcondo's laterite deposits, Dominican Rep. (preliminary results) (F. Longo)
- 15:40 Paleogene thrust emplacement of serpentinite in southwestern Puerto Rico (Laó-Dávila D. A.)
- 16:00 Cretaceous/Paleogene boundary deposits and paleogeography of western and central Cuba at the time of the Chicxulub asteroid impact event (J.L. Cobiella-Reguera)

From 16:20 to  
18:30

#### **Coffee break and poster session**

- Posters**
- Tectonothermal evolution of the high-P Samaná metamorphic complex: record of intraoceanic subduction and continental collision in the northern Caribbean convergent margin (J. Escuder-Viruete)  
 Intraoceanic subduction and arc-continent collision in northern Caribbean: insights from the large-scale structure of the Río San Juan metamorphic complex (J. Escuder-Viruete)  
 Geothematic mapping in the Dominican Republic (IGME-BRGM-INPPSA)

From 18:00

#### **CARIBE WAVE 2011, Public conference**

- 1- Narcisse Zahibo (UAG) : Qu'est-ce qu'un tsunami ? Historique des tsunamis dans les Petites Antilles.
- 2- Jean-Marc Mompelat (BRGM) : Modélisation des impacts, des risques : état des lieux et perspectives.
- 3- Marie Paule Bouin (OVSG-IPGP) : Le système d'alerte aux tsunamis dans la Caraïbe : où en est-on ?
- 4- Eric Jouret (SIDPC, Préfecture de Guadeloupe) : Etat des lieux et perspectives de la réponse de sécurité civile.

#### **Room 2 – “Goyave”**

Session:           **Volcanology and Volcanic Risks**

- 8:00 On the explosivity of lava domes (G. Boudon)
- 8:20 Scenario definition, hazards assessment and risk mitigation for the next eruption of La Soufrière of Guadeloupe: contributions from the CASAVA Project (J-C Komorowski)
- 8:40 Halogen behaviours during andesitic magma degassing: from magma chamber to volcanic plume (H. Balcone-Boissard )
- 9:00 Effects of large flank collapse events on the magma production and evolution of volcanoes: Examples from the Lesser Antilles Arc (G. Boudon)
- 9:20 Remote and in situ plume measurements of acid gas release from La Soufrière Volcano, Guadeloupe (M-L Bernard)
- 9:40 Géochimie isotopique de l'hélium dans les eaux et gaz de la Guadeloupe : interations entre fluides magmatiques et eaux souterraines (P. Allard)

### **Coffee break**

Session: **Seismic risks and Tsunamis**

- 10:30 Efforts pour établir une surveillance sismique et géodésique en Haïti (J-R Altidor)
- 10:50 ECAR Observatories : a collaborative program for monitoring and science (J-B de Chabalier)
- 11:10 Source parameters of the Mw 7.4 Martinique earthquake (windward islands) of November 29, 2007 deduced from near-field strong motion data inversion (M-P Bouin)
- 11:30 Evidence of stress drop magnitude scaling and stochastic ground-motion model from accelerometric data recorded in the French West Indies (S. Drouet)
- 11:50 Regional and local seismic hazard mapping for seismic risk mitigation of Santiago de los Caballeros (Dominican Republic) (M. Belvaux)
- 12:10 Blind inversions of shear-wave velocity and damping factors at a borehole station in Belle-Plaine, Gosier, Guadeloupe (F. de Martin)

From 12:30 to  
14:00

### **Lunch**

Session: **Seismic risks and Tsunamis**

- 14:00 Bootstrap Determination of b-values: An assessment of Statistical Estimators with Synthetic ETAS Sequences of Magnitudes (M. Bengoubou-Valerius )
- 14:20 Etude comparative de modèles stochastiques pour l'activité sismique (L. Valmy)
- 14:40 From Geology to Realistic Large-Scale Spectral-Element Earthquake Simulations in the Pointe-à-Pitre Region (F. de Martin)

- 15:00 Tsunami deposits and liquefaction structures in the plio-pleistocene sedimentary deposits of Guadeloupe Grande-Terre, FWI (J-L Léticée)
- 15:20 Tsunami Hazard for the French West Indies, Lesser Antilles (N. Zahibo)
- 15:40 Tsunami source generated by a sector collapse episode at Kick'em Jenny volcano: waves propagation and risk assessment (F. Dondin)
- 16:00 Rogue Waves in the Ocean as a Part of Marine Natural Hazards (E. Pelinovsky)

From 16:20 to  
18:30

### **Coffee break and poster session**

Posters	<p>Volcanic hydro-geomorphology and the rediscovery of an ancestral (Carib, Kalinago) problematic in the Lesser Antilles : the case of the Montagne Pelée (G. Lalubie)</p> <p>Etude des circulations hydrothermales associées aux principaux axes de faiblesse recoupant le dôme de la Soufrière de Guadeloupe, par couplage de méthodes de tomographie de résistivité électrique, polarisation spontanée, thermique et gaz du sol (A.Finizola)</p> <p>A high-resolution reconstruction of the recent eruptive past of La Soufrière de Guadeloupe over the last 12 000 years (Y. Legendre)</p> <p>Geophysical Imaging of La Soufrière Volcano (O. Coutant)</p> <p>Timing of flank collapse events in the Lesser Antilles arc (A. Samper)</p> <p>K/Ar dating and DEM-based reconstruction of southern Basse-Terre volcanoes (Guadeloupe, FWI): contribution to the Lesser Antilles arc construction rates (A. Samper)</p>
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From 18:00

### **CARIBE WAVE 2011, Public conference**

- 1- Narcisse Zahibo (UAG) : Qu'est-ce qu'un tsunami ? Historique des tsunamis dans les Petites Antilles.
- 2- Jean-Marc Mompelat (BRGM) : Modélisation des impacts, des risques : état des lieux et perspectives.
- 3- Marie Paule Bouin (OVSG-IPGP) : Le système d'alerte aux tsunamis dans la Caraïbe : où en est-on ?
- 4- Eric Jouret (SIDPC, Préfecture de Guadeloupe) : Etat des lieux et perspectives de la réponse de sécurité civile.

## **THURSDAY MARCH 24<sup>th</sup>**

### **Room 1- “Maracuja”**

#### **Session: Active Geodynamics**

- 8:00 Seismic Sequences Associated with Complex Subduction in the Northeast Caribbean (Pulliam, J.)
- 8:20 The Jan.12, 2010 Haiti earthquake : looking for the fault, from aftershock distribution. Results of the Haiti-OBS experiment (Mercier de Lepinay, B.)
- 8:40 Is the Caribbean plate subducting underneath Hispaniola? (Llanes-Estrada P.)
- 9:00 Marine geophysical research helps to asses the seismic hazard at the Hispaniola Island (Carbò-Gorosabel A.)
- 9:20 Offshore shallower structure of the collision zone between the Muertos thrust belt and the Beata Ridge (NE Caribbean) (Granja-Bruña J.-L. )
- 9:40 Continuous GPS Observations Give Insight into Puerto Rico -Virgin Islands Forearc Deformation (Lopez-Venegas A.)

#### **Coffee break**

- 10:30 Seismic Activity offshore Martinica and Dominica islands (Central Lesser Antilles Subduction Zone) from temporary onshore and offshore seismic networks (Ruiz M.) - Monfret T.
- 10:50 Approach to the submerged fore-arc of the Lesser Antilles subduction : Integrated Marine MCS, Refraction, OBS seismic activity and Noise recording (Laigle M.)
- 11:10 Tectonic evolution of Barracuda Ridge and Tiburon Rise at the front of Barbados accretionary prism as recorded by Cenozoic stratigraphy (Pichot T.)
- 11:30 Relative sea level variations on the last two centuries in Martinique: Insights from corals microatolls (Weil-Accardo J.)
- 11:50 Les Saintes volcanic system: a field survey for structural reappraisal (Mazabraud Y.)
- 12:10 Structural context of the Bouillante area: Contribution of high resolution marine geophysical surveys (western shelf of Basse-Terre Island, Guadeloupe, French West Indies) (Thinon I.)

From 12:30 to  
14:00

#### **Lunch**

From 14:00 to 16:00	<b>Workshops</b>
From 16:00 to 16:30	<b>Coffee break</b>
From 16:30 to 18:30	<b>Poster session</b>
Posters	<p>3D Fore-arc structure offshore Martinique and Dominique island (Galv�� A.)</p> <p>Active faulting induced by slip partitioning inMontserrat and link with volcanic activity: New insights from the 2009 GWADASEIS marine cruise data (Leclerc, F.)</p> <p>The Kashallow Program - A study of the tectono-sedimentary architecture of Marie-Galante basin in the Lesser Antilles fore-arc (J.F. Lebrun)</p> <p>Vertical deformations related to the January 12 2010 Ha��ti earthquake (J. Weil-Accardo)</p> <p>Subduction-to-Strike-Slip Transition in the Southeast Caribbean Using Deeply Penetrating Seismic Reflection Lines and Tomography (T. Alvarez)</p> <p>Sobre el origen de la sismicidad en la Sierra Nevada de Santa Marta y la Pen��nsula de La Guajira, Colombia. (G. Chicangana)</p>

#### **All audience conferences at the Universit   Antilles Guyane**

14:00 L'  volution g  ologique de la plaque Cara  bes: un cas d'  tude exemplaire de la convergence des plaques (J-M Lardeaux)

15:00 Enseigner la G  ologie aux Antilles: quels savoirs pour quel public? (Y. Mazabraud)

## **Room 2 – “Goyave”**

Session: **Pedology, Subsurface, biogeology**

8:20 The West-Indian Sloanea and the age of the recent arc (Rousteau)

8:40 Chemical weathering and erosion rates in Lesser Antilles: an overview in Guadeloupe, Martinique and Dominique (Rad, S.)

9:00 Sols dérivés de roches volcaniques : un patron de leurs constituants et propriétés (Cabidoche, Y.M.)

Session: **Landslides and Gravity instabilities**

9:20 Earthquakes induced landslides: using Carbon -14 technique to date earthquake events (L. Brown)

9:40 2009-2010 landslide crisis in Martinique related to the 2007 North Martinique earthquake (V. Clouard)

### **Coffee break**

10:30 Rainfall induced river flood modelling in Jamaica with special emphasis on Port Maria, St Mary (A. Mandal)

10:50 Séisme du 12 janvier en Haïti : Premiers enseignements sur l'importance des effets de site et des mouvements de terrain induits dans l'explication des dégâts observés (J-M Mompelat)

11:10 Pluviométrie et calculs de stabilité de talus routiers en Haïti (H. G. Rameau)

11:30 Mouvements de terrain associés aux intempéries du 5 mai 2009 en Martinique (Antilles françaises) – retour d'expérience (A.V. Barras)

11:50 Etude des caractéristiques géophysiques, géotechniques et de rétention d'eau des sols du Massif de la Selle (Kenscoff-Haïti) (J. Berthoumieux)

12:10 Evaluation and prevention of soil liquefaction at Fort-de-France (Martinique) (E. Vanoudheusden)

From 12:30 to  
14:00

### **Lunch**

From 14:00 to  
16:00

### **Workshops**

From 16:00 to  
16:30

### **Coffee break**

From 16:30 to  
18:30

**Poster session**

Posters	Analysis of 2009-2010 lahars in Prêcheur River, Martinique, with acoustic, seismic, Lidar topographic, and meteorological radar data (V. Clouard) Historical record of landslides, floods, and lahars in the Prêcheur river catchment, Montagne Pelée Volcano (Martinique Island, Lesser Antilles arc) from 1865 to 2010 (C. Aubaud) Interpretation of the piezometric fluctuations associated to the november 29, 2007 7.4 earthquake in Martinique (B. Vittecoq) Liquefaction risk assessment for natural soils: the Belle-Plaine borehole test site (Gosier, Guadeloupe) (E. Foerster)
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- 14:00 L'évolution géologique de la plaque Caraïbes: un cas d'étude exemplaire de la convergence des plaques (J-M Lardeaux)  
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