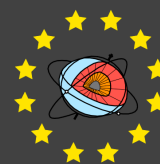
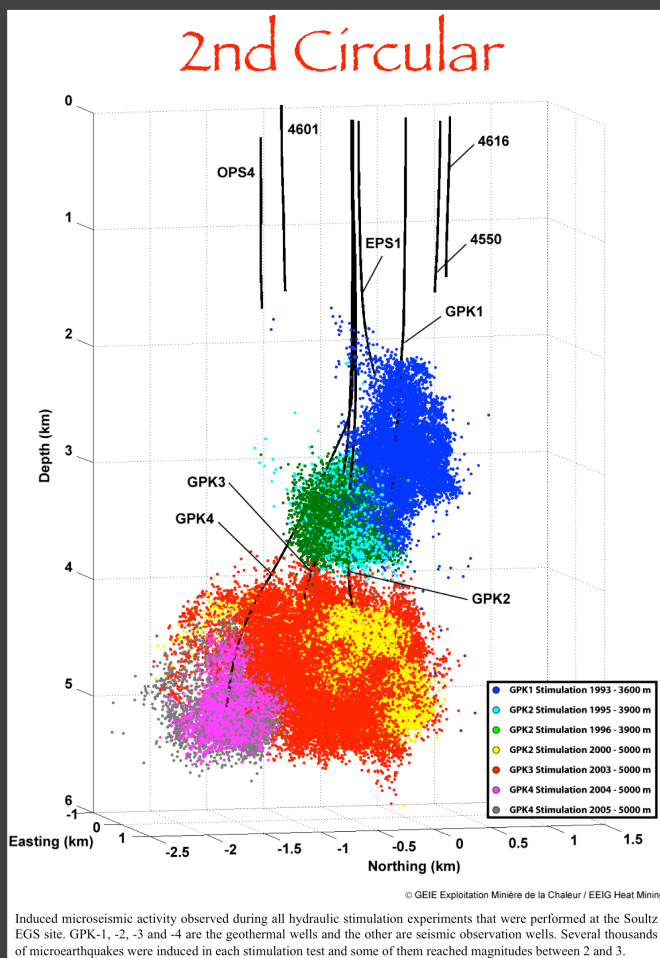




ECGS-FKPE Workshop
European Center for Geodynamics and Seismology
in collaboration with
Forschungskollegium der Physik des Erdkörpers



Induced Seismicity



Luxembourg, November 15-17, 2010
Hilton Hotel Luxembourg

SCIENTIFIC COMMITTEE :

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FKPE
Forschungskollegium Physik des Erdkörpers e.V.

Information will be updated regularly. Please consult the web page to find the information that could be missing at the time of your download.

SCOPE OF WORKSHOP

Induced seismicity deals with man-made ground shaking due to direct human intervention inside the Earth such as deep mining, water reservoirs etc. Earthquakes induced by geothermal exploration activities, sometimes called deep heat mining, stopped the multi-million EURO investments in Basel (Switzerland) and the Geysers (California). In southern Germany induced seismicity delays or may even stop geothermal power plants and poses a serious threat to future investments worth several 100 million EURO. Similar problems are known from different areas within Europe. Thus induced seismicity calls forth questions whether geothermal power production is an alternative to other energy sources, although geothermal energy is renewable, base-loadable and CO₂ free.

Induced seismicity is also reported from gas fields, mines and water reservoirs in Europe. The widely discussed storage of CO₂ in the underground (CCS: carbon capture and storage technology), which means injection of fluids at depths of some kilometers, is also a future possible cause for induced seismic events. Thus the future energy supply is related to induced seismicity in several fields. On the other hand, some of the mechanisms related to man-made stress changes at depth are only poorly understood as well as the ambient physical conditions in the reservoir. Therefore we urgently need more data, physical theories and case studies to get a better handle on induced seismicity.

The aim of the ECGS-FKPE Workshop on „Induced Seismicity“ is to bring together leading scientists that work in this field. In contrast to similar workshops on this theme, we want to bring together mainly academic researchers as well as representatives from state geological surveys or state earthquake monitoring agencies. A special volume of the Cahiers du Centre Européen de Géodynamique et de Séismologie will be published with extended abstracts (to be printed just before the workshop).

SCIENTIFIC COMMITTEE & INVITED SPEAKERS

N. Cuenot	EEIG Heat Mining, France
B. Dost	KNMI, The Netherlands
S. Husen	ETH Zurich, Switzerland
M. Joswig	University of Stuttgart, Germany
A. Oth	ECGS, Luxembourg
J. Ritter	KIT, Germany
S. Shapiro	Freie Universität Berlin, Germany

LOCAL ORGANIZING COMMITTEE

A. Oth	ECGS, Luxembourg
C. Galassi	ECGS, Luxembourg
G. Celli	ECGS/MNHN, Luxembourg
E. Buttini	ECGS/MNHN, Luxembourg

WITH THE SUPPORT OF

Forschungskollegium Physik des Erdkörpers e.V. (FKPE)
Fonds National de la Recherche (FNR)
Landesforschungszentrum Geothermie – Baden-Württemberg (KIT)
The Council of Europe (EUR-OPA)
The National Museum of Natural History (MNHN)

DEADLINES & IMPORTANT DATES

September 13, 2010	<u>Abstract submission and registration deadline</u>
October 1, 2010	<u>Submission deadline for contributions to Special Volume of Cahier Bleus</u>
October 29, 2010	Authors notification regarding Cahiers Bleus
November 15, 2010	ECGS-FKPE Workshop starts

REGISTRATION FEE, VENUE AND ACCOMODATION

The conference will be held from November 15 to 17, 2010 at the Hilton Hotel Luxembourg, in close proximity of the center of Luxembourg City, capital of the Grand Duchy of Luxembourg.

The registration fee is 200 € and includes:

- Icebreaker on Sunday evening
- Coffee breaks
- Lunches during the workshop (Monday, Tuesday and Wednesday)
- Official dinner on Tuesday night
- A copy of the Special Volume of the Cahiers Bleus and abstract volume

PLEASE NOTE: For participants presenting a talk or poster (and who's abstract is accepted by the scientific committee following the submission deadline), ECGS will cover two nights (Monday – Wednesday, incl. breakfast) at the Hilton Hotel. Additional nights can be reserved for only 115 € per night. Any extras (phone, mini bar...) are at the charge of the participants.

Participants are responsible for booking their accommodation in due time. A package of rooms is available at the Hilton Hotel and the reservation of these can be made online under the following URL:

http://www.hilton.com/en/hi/groups/personalized/LXMHIHI-GECCA-20101114/index.jhtml?WT.mc_id=POG

The number of participants will be limited, so register NOW!

Hotel Hilton Luxembourg

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L-1466 Luxembourg
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Fax +352 43 6095

eMail : hilton.luxembourg@hilton.com

Home page: http://www1.hilton.com/en_US/hi/hotel/LXMHIHI-Hilton-Luxembourg-hotel/index.do

HOW TO REACH THE HOTEL

By car (see also www.maps.google.com)

From Luxembourg city centre, follow the signs towards Echternach. Turn right just before the Q8 petrol station, turn left at the 3rd set of traffic lights. From there, follow the signs to the Hilton Luxembourg hotel.

Please find a map to help you plan your trip under the following link :

[Map for ECGS-FKPE workshop trip planning](#)

By train

Luxembourg Central Station is 6 km from the hotel. You can reach the hotel by bus: outside the Central Train Station, take the bus number 5 in the direction of Dommeldange leaving from platform 1 every 20 minutes during the week and every 60 minutes on Sunday. Get out at "Parc de l'Europe" (last stop of the line), directly close to the Hilton Hotel. A time table can be found at the end of this circular.

More information can be found on http://www.vdl.lu/Horaires_+trajets+et+plans.html and <http://www.mobiliteit.lu/>.

For train connections to Luxembourg, please check: <http://www.cfl.lu/>)

By plane

Luxembourg Airport is located 9 km from the hotel. You can reach the hotel by bus taking the bus number 16 in the direction of Central Train Station. Leave the bus at the Central train station and take the bus number 5 in the direction of Dommeldange leaving from platform 1 every 20 minutes during the week and every 60 minutes on Sunday. Get out at "Parc de l'Europe" (last stop of the line), directly close to the Hilton Hotel. A time table can be found at the end of this circular.

You can also hire a car or take a taxi. Please note that the Hilton Hotel also offers a courtesy bus service to/from the airport upon request. The reservation of the hotel shuttle from the airport to the hotel can be made at the time of reservation and the return trip can only be reserved at the hotel concierge during your stay. The shuttle time tables can be found together with the public bus time tables below.

LOCATION: THE CITY OF LUXEMBOURG

The conference will be held at the Hilton Hotel in close proximity to the center of Luxembourg, the cosmopolitan capital of the Grand Duchy of Luxembourg.

Luxembourg was a fortress city with reputation to be unseizable, strategically located between the French Kingdom and the German Empire. It was one of the major strongholds in Europe from the 16th Century through its dismantlement in 1867.

Today, Luxembourg is well known as an international Financial Center and for hosting key institutions such as the European Parliament and the European Court of Justice. It is a dynamic and modern city, was European Capital of Culture for the second time in 2007, and is part of the World Heritage List of UNESCO. Enjoy its Old Quarters, fortifications, museums, exhibitions and more. See for instance the Luxembourg City Tourist Office's web site (<http://www.lcto.lu/>) or National Tourist Office (<http://www.ont.lu/>)

TENTATIVE PROGRAM

Sessions will be composed of one or two keynote lecture(s) (30min+10min discussion) followed by talks of 15min+5min discussion. Authors who present a poster will be given 3min **(one slide only)** for the presentation of their posters in a dedicated session. Posters will be displayed during the entire workshop.

For smooth transitions, speakers are requested to upload their presentation on the organization computer at least during the break before the session.

The following aspects will be discussed in dedicated sessions:

- Monitoring strategies
- Modelling of source processes
- Tectonic stress and rock physics related to induced seismicity
- Strategies to avoid/reduce induced shaking
- Case studies

For detailed and updated program please refer to the meeting's web page.
(<http://www.ecgs.lu/ecgs-fkpe-workshop-induced-seismicity/>).

POSTERS

Max dimensions: 95 x 210 cm, Portrait orientation.
Mounting material will be supplied at the conference.

CANCELLATION / REFUND POLICY

Due to booking requirements, we are obliged to apply the following refund rates:

Before July 31 cancellation is accepted at no charge.

Refund rate for later cancellations can be summarized as follow:

Cancellation before October 13, 2010	→ 70% refund
Cancellation from October 13 and before November 3 2010	→ 50% refund
Cancellation from November 3 and before November 14 2010	→ 30% refund
Cancellation from November 14 2010 until the end of the workshop	→ 0% refund

METHOD OF PAYMENT

You may pay the registration fee by credit card (Visa and Mastercard) or by bank transfer.
See registration form below.

ABSTRACTS

Contribution abstracts (talks and posters) are required for program selection. The abstract volume will be included in the Special Volume of the Cahiers Bleus and will be distributed at the workshop registration.

Guidelines:

Due: September 13, 2010 by e-mail to Ms Corine GALASSI (induced@ecgs.lu).
Length: Maximum 2 pages including figures.
Margins: A4, 2.54 cm top/bottom margins
3.17 cm right/left margins
Font: Title: Arial 12 Bold, centered
Authors and affiliation: Arial 9
(For oral presentation: underline the speaker)
Text: Times New Roman 12
Color: will be printed in black and white
Format: MSWord or rtf.

PROCEEDINGS

The proceedings of the conference will be published in the “Cahiers du Centre Européen de Géodynamique et de Séismologie”. The contributions will be requested prior to the meeting (deadline October 1, 2010!) to enable us to distribute the proceedings volume at the meeting. For previous volumes, see <http://www.ecgs.lu/cahiers-bleus/>.

Contributions submitted should not exceed 5 pages. Color figures will be printed at no charge. One volume will be provided to every participant at no additional charge. Format and guidelines will be published on the meeting website soon.

PRACTICAL INFORMATION

Visa: A visa is required for all non-EU member state residents. Please contact the Luxembourg embassy or consulate in your country for more detailed information. If you need an invitation letter from the Local Organizing Committee in order to obtain your visa, please specify it in the registration form.

Weather: The Grand Duchy of Luxembourg enjoys a temperate climate without extremes. Average daily temperature is about 8°C in November and average temperature at night is around 2 °C although freezing is not unusual. Rain is frequent with an average of 60mm in 12 days in November.

Currency: Euro (€) (Banks are usually open between 9 a.m. and 5 p.m.).
Electricity: 220V, 50Hz. (European plug with two circular metal pins).

For more information, please contact induced@ecgs.lu
