



IGRGEA LETTER

International Geophysical Research Group /Europe-Africa

International Geophysical Research Group /Europe-Asia

IGRGEA

At the end of the IEEY (International Equatorial Electrojet Year), in 1995, IGRGEA (International Geophysical Research Group Europe Africa) has been organized to follow the research work initiated during IEEY, in 1992. Since January 2003 IGRGEA has been established at the Institute of Geophysics in Hanoi, Vietnam.

The last letter, No. 58, dated June 2017.

BURKINA FASO

Dr Pétronille KAFANDO will defend by the last 2018 term in Côte d'Ivoire, her "state thesis" in physics about "gravity waves observed during the African monsoon". Her stays in France (LATMOS in Paris and LACy in Ile de la Réunion) in the lab of their advisors were supported by various financial supports including a grant from the from Embassy.

COTE D'IVOIRE

Didier Franck GRODGI defended his thesis on June 30 at Houphouët Boigny University in Abidjan, Côte d'Ivoire. The theme of his thesis is: "*Study of the Equatorial Electrojet from the electrodynamic parameters of the equatorial ionosphere*".

All the members of the Jury present are PhD students from GIRGEA.

Jury members

Chairperson: Arsène KOBÉA, Research Director Houphouët Boigny University in Abidjan, Côte d'Ivoire (PhD GIRGEA in 2000)

Reporter: Frédéric OUATTARA, Professor, University of Koudougou, Burkina Faso (PhD GIRGEA in 2009)

Reporter: Olivier OBROU, Senior Lecturer Houphouët Boigny University in Abidjan, Côte d'Ivoire (PhD GIRGEA in 2008)

Examiner: Christine Amory-Mazaudier, Researcher at Sorbonne Universities, France.

Thesis Director: Vafi DOUMBIA Senior Lecturer, Houphouët Boigny University in Abidjan, Côte d'Ivoire (PhD GIRGEA in 2008).

Photo of Franck's dissertation



From left to right: V. DOUMBIA, A. KOBÉA, Franck and his wife, F. OUATTARA and O. OBROU

Two more theses should be supported in the 2nd semester in Ivory Coast

* Thesis of Jean ACKAH on '*the scintillations of the GPS signal*'.

*Thesis by Soro Ibrahim COULIBALY on "*the variations of the ionospheric layer F at night during magnetic disturbed periods*".

CAMEROON

Honoré MESSANGA ETOUNDI defended his thesis on March 2, 2018 at the University of Yaoundé in Cameroon. Title of the thesis: "*Measurement and interpretation of the regular variation of the components (XYZ) of the Earth's magnetic field in Yaounde-Cameroon*".

Composition of the Jury:

Chairperson: Timoléon Crépin KOFANE, Professor, University of Yaoundé 1, Cameroon

Reporter: Claude Marie NGABIRENG, Associate Professor, University of Yaoundé 1, Cameroon

Reporter: César MBANE, Associate Professor,
University of Yaoundé 1, Cameroon
Member: André LENOUE, Lecturer University of
Douala, Cameroon
Member: Philippe NJANDJOCK NOUCK, Lecturer,
University of Yaounde 1, Cameroon
Member: Théophile NDOUGSA MBARGA,
Professor, University of Yaoundé 1, Cameroon

Honoré Messanga Etoundi



FRANCE

Dr. Frédéric PITOUT defende his HDR on June 27 at 2.30 pm at IRAP in Toulouse, about "*Contribution to studies on solar wind - magnetosphere - ionosphere - thermosphere couplings*"

Jury Members:

Pierre-Louis Bletly, director of research at IRAP (Toulouse, France)

François Leblanc, research director at LATMOS (Paris, France)

Reporter : Viviane Pierrard, professor at UCL (Leuven, Belgium)

Reporter: Natalie Webb, astronomer at IRAP (Toulouse, France)

Examiner: Naima Zaourar, Professor at USTHB (Algiers, Algeria)

Reporter: Philippe Zarka, astronomer at LESIA (Meudon, France)

MALAYSIA

Farah ADILAH BINTI MOHD KASRAN defended her thesis on June 1st at 'Universiti Teknologi Mara'. Title of the thesis: *Empirical characterization of Equatorial geomagnetically induced currents (GICS) due to space electromagnetic disturbances.*

Jury members:

Chairperson: Ahmad Hamdan Abdullah, Professor, Faculty of Applied Sciences, Universiti Teknologi Mara, Malaysia
Internal Examiner: Muhammad Murtadha Othman, Associate Professor, Faculty of Electrical Engineering, Universiti Teknologi Mara, Malaysia

Internal Examiner: Tajul Ariffin Musa, Associate Professor, Faculty of Geinformation & Real Estate, Universiti Teknologi Mara, Malaysia

External Reviewer: Christine Amory, Senior Scientist, Sorbonne Universities, France.



Photo of Farah's dissertation

REPUBLIQUE DEMOCRATIQUE DU CONGO

Dr. Jean KIGOTSI defended his thesis publicly on May 11, 2018 at the University of Kinshasa, UNIKIN, on the theme: '*Analysis of the flash activity of storm systems in the Congo Basin*'

A private defense of this thesis took place on December 1, 2017, see the previous letter.

Photo of Jean's dissertation



The jury was as follows:

Professor Mbungu Tsumbu: Chairperson (RDC)

Professor Zana Ndontoni: Secretary (RDC)

Professor Kazadi Mukenga Bantu: Promoter and Full Member (RDC)

Professor Serge Soula: Full member, University of Toulouse, (France)

Professor Christelle Barthe: Full member (RDC)

Alternate members

Professor Kakule Kaniki (RDC)

Professor Jean Montanya (RDC)

Press release

Climatology of storms in the Congo Basin Thesis defense of Jean Kigotsi Kasereka

Jean Kigotsi Kasereka defended his thesis on Friday, May 11, 2018 at the University of Kinshasa (UNIKIN) in the Democratic Republic of Congo (DRC) before a jury of 5 professors and the higher authorities, the Faculty of Sciences and the University. He obtained the title of Doctor of the University with great distinction and donned the toga of Professor for the circumstance. This dissertation prepared jointly by the University of Toulouse III and UNIKIN, supported by the French Embassy in Kinshasa, allowed Jean Kigotsi Kasereka to make 3 stays at the Aerology laboratory, in Toulouse, France. The subject focused on the spatio-temporal analysis of thunderstorm activity in the Congo Basin, an area of about 2500 km by 2500 km that concentrates 10% of global lightning activity. This work started as part of the activities of the International Geophysical Research Group Europe Africa (GIRGEA). Serge Soula,

director of the thesis at the LA, participated in the on-site jury and Jean-François Georgis co-director, also participated by skype.

Two other theses will soon be defended by DRC students:

Kenny KHALE-SAYI will defend his thesis on July 9, 2018 at the University of Strasbourg. Title his thesis: '*Study of the correlated background noise induced by cosmic muons in the Double Chooz experiment.*'

Raphaël MUKHANDILA will defend his thesis in September 2018 at the University of Strasbourg on the theme: '*Analysis of GNSS data from the African continent from 1994 to June 2017: characterization of movement and active deformations.*'

These two students were funded by the French Embassy in Kinshasa. After the defense of their thesis they will return to the DRC to teach and do research in Kinshasa.

REPUBLIQUE DU CONGO

Bienvenu DINGA defended his thesis on November 20, 2017 at the Marien Ngouabi University in the Republic of Congo on the theme: '*Study of material dynamics in the Congo Basin: case of solid and dissolved suspensions.*'



After Bienvenu 's dissertation

Jury members:

Chairperson: Bernard MPASSI-MABIALA,

Professor University Marien Ngouabi (Congo)

Reporter: Jean BIEMI, Professor University F. Houphouët Boigny (Côte d'Ivoire)

Reporter: Paul Sand MOUSSOUNDA, Professor Marien Ngouabi University (Congo)



Members:

Dominique NGANGA, Professor, University Marien Ngouabi (Congo) and Urbain Gampio MBILOU, Associate Professor, Marien Ngouabi University (Congo)

SENEGAL

The 4th edition of the ISWI - Maghreb - West Africa (IMAO 2019) ISWI Space Weather School will take place in Thiès, Senegal from October 15 to 25, 2019. This school is organized by Idrissa Gaye: idrissagaye3@hotmail.com. For the organization of this school he is especially assisted by Naima Zaourar (Algeria), Vafi Doumbia (Ivory Coast) and Christine Amory-Mazaudier (France).

ISEA

The 15th ISEA symposium (International Symposium on Equatorial Aeronomy) will take place from 22 to 26 October 2018 at Physical Research Laboratory, Ahmedabad, India. Website: <https://www.prl.res.in/isea15/>. Guest paper will be given by Christine AMORY-MAZAUDIER and Vafi DOUMBIA on the theme: "Advances in Equatorial Electrodynamics during the International Projects IEEY, IHY and ISWT". This paper will present the many results obtained by GIRGEA.

GIRGEA WEBSITE

The new site of GIRGEA is being redesigned, here is the first page of this new site. It will be bilingual.

