HUMBOLDT KOLLEG on

Nonlinear Science, Mathematics and applications
(Yaoundé, Cameroon, 22-24 November, 2016)
supported
by the HUMBOLDT FOUNDATION,University of Yaoundé I,
Germany Cameroon

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I- Description

Nonlinear Science appears today as one of the interesting multidisciplinary scientific research area. It covers natural sciences, engineering and humanities. Because of this multidisciplinarity, Nonlinear Science is reshaping the scientific research as did Quantum Mechanics at the beginning of the 20th century. This impact on scientific ideas is quantified by the large number of research groups, departments and institutes devoted to the study of nonlinear phenomena in various scientific fields including physics, biology, social sciences and engineering. This is also quantified by the large number of scientific journals and papers published on nonlinear phenomena everyday. The development of this field has been largely supported by the mathematical formalisms put in place by applied mathematicians.

The multidisciplinary of Nonlinear Science is accompanied in some fields by the simplicity of the objects exhibiting nonlinear behavior and the reduced amount of funds necessary to carry out fundamental research. This fact has enabled contributions from various scientists in some developing countries. This is the case of Cameroon, Nigeria and Benin where the fundamental research on Nonlinear Science seems to be on the right track since almost three decades now. This has also given the opportunities to some African scientists to be granted the prestigious position of Humboldt fellows and thus to be hosted by distinguished scientists and institutes in Germany.

One of the alumni programs of the Humboldt foundation is the Humboldt Kolleg which "aims to strengthen regional and professional networking between its alumni as well as to spark junior researchers' interest in Alexander von Humboldt Foundation programs and in Germany as a research location".

Because of the already existing links between some German nonlinear scientists and mathematicians/institutes and some African scientists (nonlinear science scientists and applied mathematicians), it appears necessary to reinforce the collaboration through a Humboldt Kolleg. This will give the opportunity to this community to present their research groups and activities, and discuss their scientific results, and open new ways for new extensive collaboration.

II- Preliminary list of speakers

From Germany

- **Theo Geisel**, Max-Planck Institute for Dynamics and Self-organisation, Gottingen, Germany
- **Marc Timme**, Max-Planck Institute for Dynamics and Self-organisation, Gottingen, Germany
- **Jorgen Kurths**, Potsdam Institute for Climate Impact Research, Germany
- **Norbert Marwan**, Potsdam Institute for Climate Impact Research, Germany
- **Reik Donner**, Potsdam Institute for Climate Impact Research, Germany
- **Uwe Dorka**, Department of steel and composite structures, University of Kassel, Kassel, Germany
- **Jose Gallas**, Institute for Multiscale Simulation, Friedrich-Alexander-Universität, Erlagen

FromAfrican countries

- **Vincent E. Uchechukwu**, Redeeme'rsUniversity, Ede, Osun State, Nigeria
- **Abdulahi N. Njah**, University of Agriculture, Abeokuta, Nigeria
- **MarcMonsia,**Faculty of Science, University of Abomey-Calavi, Benin
- **C.H. Minwadinou**, Faculty of Science, University of Parakou, Benin
- **C. Ainamon**, Institut of Mathematics and Physical Sciences, Porton Novo, Benin

- **Timoléon Crépin Kofané**, Faculty of Sciences, University of Yaoundé I, Cameroon
- **Paul Woafo**, Faculty of Sciences, University of Yaoundé I, Cameroon
- **Blaise Roméo Nana Nbendjo**, Faculty of Sciences, University of Yaoundé I, Cameroon
- **SifeuTakougangKingni**, School of Mines and Geology, University of Maroua, Cameroon
- **J.H. Talla Mbé**, University of Dschang, Cameroon.
- **A.M. Dikandé**, Faculty of Science, University of Buea, Cameroon
- **B. Essimbi Zobo**, Faculty of Sciences, University of Yaoundé I, Cameroon
- **J.S. EyebeFouda,** Faculty of Science, University of Yaoundé I, Cameroon
- **B. Nana** ,Higher Teacher Training College, University of Bamenda, Cameroon.
- **MamaFoupouagnigni**, AIMS, Limbe, Cameroon
- **B. Nkemzi**, Faculty of Science, University of Buea, Cameroon
- **D. Agbor**, Faculty of Science, University of Buea, Cameroon
- **B.S. Tchapnda**, Faculty of Science, University of Yaoundé I, Cameroon
- **S. BowongTsakou**, Faculty of Science, University of Douala, Cameroon
- **Robert Tchitnga**, Faculty of Sciences, University of Dschang, Cameroon.

and more than 25 PhD students

III- Programme
The detailed program will be posted soon