

ACTIVITY REPORTING FORM

FOR CDC GRANTS PROGRAM
IMU Simons African Fellowship Program

(Deadline for completion: four (4) week after the end of the research visit)

Please note that at least four pictures of the supported activity should be included/ attached to this report (by email).

After consideration by CDC, the intention is that this activity report and pictures will be made publicly available on the CDC website.

Name of grantee: **Yaogan MENSAH**

Home institution and country of grantee: **University of Lomé, Togo**

Name of the host: **Harmut FÜHR**

Name of the host institution and country: **RTWH Aachen University, Germany**

Topic of the research activity: **Analysis of localization operators**

Dates spend at the center/host institution: **15 march-15 april, 2018**

I spent 30 days in Aachen (RWTH Aachen University), from March, 15 to April, 15. During these days I worked with Hartmut Führ. Some weeks before I reached Aachen we defined the great lines of the project and we started the discussion via emails and dropbox.

Our project is on Localization operators in general coorbit spaces. These operators appear in mathematical physics as a particular method of quantization and they are closely related to pseudodifferential operators in mathematics. The project contains many subprojects (13 subprojects).

We defined the localization operators in its general sense on general coorbit spaces. We started searching their main properties: boundedness, compactness, Fredholm property and so on. We are preparing a preprint for the obtained results. The preprint is titled Analysis of localization operators.