



INSTITUT
FRANÇAIS
Suède



RÉPUBLIQUE
FRANÇAISE
*Liberté
Égalité
Fraternité*



Philippe Thieullen

Project: Ergodic optimization of matrix cocycles

Research topic: Mathematics, Ergodic Theory, Matrix Cocycles

Swedish Institution: Ångströmlaboratoriet, Department of Mathematics, Uppsala universitet

French Institution: Université de Bordeaux, Institut de Mathématiques de Bordeaux

Dates of mobility: 5/11/2023 to 11/11/2023

Program: 2023 SFVE-A

I have been working on dynamical system and ergodic theory for 30 years. I was Maître de Conférence at Orsay from 1991 to 2003 and then professor at Bordeaux from 2003. I met Reza Mohammadpour in 2021 at Bordeaux when he was a post-doctoral student at the laboratory of Computer Science. Then Reza obtained a post-doctoral position at the department of Mathematics at Ångströmlaboratoriet. At the time he was at Bordeaux we started working at a problem of ergodic optimization for products of matrices. We met by zoom several times until my travel to Uppsala. We are now very close to finish an article (of 43 pages so far). A face-to-face collaboration is certainly necessary at the end of an article. Besides, my collaborator is applying for a permanent job at Ångströmlaboratoriet, and such a joint work is important for his career.

I stayed at the Mathematics department at Ångströmlaboratoriet for one week. An active and renowned group in dynamical system is developing there. I meet different people especially at their usual seminar and during lunch time. I met the director of the department and discussed the possibility of exchanging students. My first priority was to finish an article with Reza Mohammadpour. As explained before he may obtain a permanent position at that department and we intend to continue our collaboration on other research programs. It was my first time in Sweden and such a grant as SFVE-A is certainly very important to start creating contacts. I hope that my contribution will help my co-authors to get a position at Ångströmlaboratoriet.

Link to my home page:

<https://www.math.u-bordeaux.fr/~pthieull/>

Link to my institution at Bordeaux:

<https://www.math.u-bordeaux.fr/imb/>

Link to my collaborator::

<https://www.katalog.uu.se/profile/?id=N21-2011>