

Curriculum Vitae

Surname: SIMPORE

Name: Yacouba

Nationality: Burkinabé

Profession: Associate Professor at the Université Polytechnique de Fada
N'Gourma

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Research Themes

- 1-Optimal Control of PDEs
(Insensitizing control and Null controllability of PDEs, Sentinel methods)
- 2- Applications of mathematics to biology
- 3- Ongoing project: *Null controllability with positivity constraints and Numerical simulation for Population Dynamics Models*

My Teaching

- 1-Introduction to optimal control of PDEs (Master of Mathematics
Université Norbert Zongo 2018)
- 2- Analysis 1-2-3 (Licence Engineering degree ENSI FADA 2016-2019)
- 3- Algebra 2. (Licence Engineering degree ENSI FADA 2016-2019)
- 4- Introduction to the finite element method (Master Engineering)

Publications

2018

Pierre Lissy, Yannick Privat, Simporé Yacouba ; Insensitizing control for linear and semi-linear heat equations with partially unknown domain. To appear in ESAIM Control Optim. Calc. Var.

2017

- 1-Simporé Yacouba and Antoine Tambue, Null controllability and numerical method for Crocco equations with incomplete data based on an exponential integrator and finite difference-finite element method. Computers & Mathematics with Applications Volume 74, Issue 5, Pages1043-1058.

2- Simporé Yacouba and Oumar Traoré, Insensitizing control with constraints for the semilinear heat equation for a more general cost. Journal of non linear evolution equation and application (JNEEA).

2016

Simporé Yacouba and Oumar Traoré, Null controllability of a non linear dissipative system and application to the detection of the incomplete parameter for a non linear population dynamic model, published in February 2016 in Mathematics and Mathematical Science.

2013

Simporé Yacouba, Oumar Traoré and Ousseynou Nakoulima, Insensitizing control with control for the semilinear heat equation, published in June 2013 in NONLINEAR STUDIES Vol 20, No2 2013 page 205-218.

Visiting Research

Senior Visitor <https://cmc.deusto.es/people/devcmc.deusto.es/dycon/>
September 2018 to November 2018

Visiting research at Laboratoire Jacques Louis Lions (Université Pierre et Marie-Paris), 1st October to 30th October 2017.

Visiting research at Laboratoire Jacques Louis Lions (Université Pierre et Marie-Paris), 1st September to 30th October 2016.

Visiting research at Nlaga (Dakar), March 2016.

Visiting research at AIMS Sénégal, February 2016.

Visiting research at AIMS South Africa, 1st May to 30th July 2015 .

Visiting research at AIMS Sénégal, January 2015

University Cursus

Higher education

PHD Student : 2012-2015

Date of defense of these : 4th February 2016

Thesis supervisor : Professor Oumar Traoré (UO2-SEG)

2014/2015 : 3rd year PhD

2013/2014 : 2nd year PhD

2012/2013 : 1st year PhD

2009/2011 : Master in Applied Mathematics, optimal control option,
University of Ouagadougou LANIBIO

2008-2009 : Masters in Mathematics, University of Ouagadougou, Burkina
Faso

2007-2008 : Third Degree in Mathematics, University of Ouagadougou,
Burkina Faso

2006-2007 : DEUG 2 in Mathematics-Physics, University of Ouagadougou,
Burkina Faso