

GENERAL SEMINARS JUNE 2018

Wednesday 06 june 2018 : 2 seminars

1st seminar : 10H – 11H

Speaker : Jean d'ALMEIDA, Université de Lille, France.

Jean.D'Almeida@math.univ-lille1.fr

Title : Systèmes d'EDP linéaires à coefficients constants et fonctions G - harmoniques

Abstract : to be announced.

2nd seminar : 11H - 12H

Speaker : José-Luis JARAMILLO, Université de Bourgogne, France.

Jose-Luis.Jaramillo@u-bourgogne.fr

Title : Quasi-normal modes at the crossroad of physics

Abstract : We will first briefly review the notion of "quasi-normal mode" (or "scattering resonance") in scattering theory. Then we will discuss the role of quasi-normal modes in different physical domains, with a focus on gravitational physics and optical nano-resonators, but opening also to problems in oceanography. Finally, we will consider the so-called "resonant expansions" as a tool to prove the near-field around compact scatterers, with an eye set on the strong field regime around (binary) dynamical black holes.

Wednesday 13 june 2018 :

10H - 11H

Speaker : Ricardo Uribe-Vargas, Université de Bourgogne, France.

r.uribe-vargas@u-bourgogne.fr

Title : Equidistant Fronts, support front, and duality

Wednesday 20 june 2018

10H – 11H

Speaker : Gérard AWANOU, University of Illinois, Chicago, USA.
awanou@uic.edu

Title : Aleksandrov-type discret solutions of Monge-Ampere equation

Abstract : The Monge-Ampere equation is a nonlinear equation with various applications as in geometrical optics and materials science. We present some convergence results for a finite difference method concerning Aleksandrov-type solutions.

Wednesday 27 june 2018 : 2 seminars

1st seminar : 10H - 11H

Speaker : Babacar THIONGANE, HEC, Montreal, Canada. thionganebabacar@yahoo.fr

Title : The Routing and Wavelength Assignment Problem

Abstract : This work deals with solving the Routing and Wavelength Assignment problem where the number of accepted connections is to be maximized. Lagrangean decomposition as well as Lagrangean relaxation are studied for both node-arc formulations and arc-path formulation. It is shown that relaxing the demand constraints yields an edge-disjoint path problem with profits that is NP-hard, while the Lagrangean problem obtained when the clash constraints are relaxed becomes a shortest path problem or a 0-1 linear knapsack problem, depending on the formulation used. Moreover, it is shown that the Lagrangean decomposition is not stronger than the Lagrangean relaxation of the demand constraints. We also propose a sub-gradient algorithm to solve the Lagrangean dual obtained by relaxing the clash constraints. Numerical results demonstrate a high quality of Lagrangian dual bounds with fast computation time.

2nd seminar : 11H – 12H

Speaker : Fortuné MASSAMA, University of Kwazulu-Natal, South-Africa ;
Simons-Foundation Fellow at IMSP, Dangbo, Benin. Massamba@ukzn.ac.za

Title : Some geometric aspects of indefinite locally conformal cosymplectic manifolds

Abstract : to be precised