



Université Cadi Ayyad
FACULTE DES SCIENCES SEMLALIA
Département de Mathématiques



Workshop dans le cadre du
Programme EuroMéditerranée 3+3
« Modèles et Méthodes Mathématiques en
Dynamique Cellulaire »



Marrakech, 27-28 Janvier 2014.



Programme du Workshop

Lundi 27 - 01- 2014. (Matinée)

9h -9h10. Accueil et mot de bienvenue

9h10 -9h30. Jean Clairambault : "Drug resistance in cancer cell populations: Genetic or epigenetic phenomenon? Biological and mathematical assessment".

9h30 - 9h50. Marcello Delitala : "Mathematical model of competition between cancer cells and T-cells under immunotherapy".

9h50 - 10h10. Rebecca Chisholm : "Mathematical model of segmentation in Onychophora".

10h10 - 10h30. Xavier Dupuis : "Optimal control of leukemic cell population dynamics".

10h30 -11h. Pause café

11h -11h20. Jan Elias : "Dynamics of p53 in single cells: physiologically based ODE and reaction-diffusion PDE models".

11h20 – 11h40. Oscar Angulo : "A second order numerical scheme for a size-structured cell population model".



11h40 – 12h. Léon Matar Tine : "Inverse problem to estimate the cell division rate in population dynamics".

12h – 12h20. Tommaso Lorenzi : "Effects of space structure and combination therapies on phenotypic heterogeneity and drug resistance in solid tumors".

12h20 -12h40. Abdennasser Chekroun : "Traveling wave fronts for time-delayed reaction-diffusion hematopoietic stem cell model".

12h 40 – 14h30. Pause déjeuner

Lundi 27 - 01- 2014. (Après - Midi)

14h30 – 15h30. Discussions

15h30 – 16h30. Groupes de travail

Mardi 28 -01- 2014. (Matinée)

9h – 9h20. Fabien Crauste : "Modeling the CD8 T cell response: Stability analysis and parameter estimation".

9h20 – 9h40. Loïc Barbarroux : "Multiscale modeling of the primary immune response".

9h40- 10h00. Marine Jacquier : "A model of the dynamics of body weight, food intake and energy expenditure in rats".

10h00 – 10h20. Youssef Bourfia : "Mathematical model of hematopoiesis dynamics with growth factor-dependent coefficients".



10h20 -10h40. Pause café

10h40 – 11h00. Benjamin Roche : " Dynamics of immune system and accumulation of cancerous cells "

11h00 – 12h30. Table ronde et discussions

12h 30 – 14h. Pause déjeuner

Mardi 28 -01- 2014. (Après - Midi)

14h00 – 15h30. Groupes de travail

A partir de 15h30. Visite de la cité ocre