MEETING OF THE ANR LAMBDA. SATELLITE TO TAN LEI' CONFERENCE.

Program

(Room 314 IHP)

Thursday 26 october

- 2:30 pm 3:30pm : Michel Zinsmeister
- Coffee Break at the second floor
- 4 pm 5pm : Charles Favre

Friday 27 october

- 10 am to 11am : Hiroyuki Inou
- Coffee Break at the second floor
- 11:30 am 12:30 am : Wolf Jung
- Lunch break
- 14:30 am 15:30 am : Araceli Bonifant
- Coffee Break at the second floor
- 16 am -17 am : Matthieu Astorg

Tentative list of participants :

Mathieu Astorg , Kuntal Banerjee , Araceli Bonifant ,Xavier Buff ,Arnaud Chéritat ,Jordi Canela ,Artem Dudko ,Charles Favre ,Marguerite Flexor ,Thomas Gauthier ,Sebastien Godillon ,John Hammal Hubbard ,Hiroyuki Inou ,Wolff Jung ,Van Tu Le ,Zhiqiang Li , Nicolae Mihalache ,John Milnor ,Marti Pete ,Carsten Petersen ,Jasmin Raissy , Pascale Roesch ,Dierk Schleicher ,Mistuhiro Shishikura ,Aminosadat Talebi ,Dylan Thurston ,Jérome Tomasini ,Jonguk Yang ,Michel Zinsmesiter

Abstracts :

• Michel Zinsmeister : Variation of the Hausdorff dimension of real quadratic Julia sets quadratiques rels (with Ludwik Jaksztas (Varsovie).

Abstract: We study the derivability of the fonction $c \to d(c)$ (dimension of the Julia set of $z^2 + c$) at real points c such that $z^2 + c$ admits a parabolic cycle between Feigenbaum point and 1/4.

• Charles Favre : Blow-up of Lyapunov exponents.

Abstract: We shall discuss techniques to control the blow-up of Lyapunov exponents in degenerating meromorphic families of holomorphic dynamical systems.

• Hiroyuki Inou : Title: Misiurewicz approximation of parabolic maps

Abstract: We give a new example of parabolic maps in the activity locus which cannot be approximated by Misiurewicz maps.

• Wolf Jung : Title: Slow mating and equipotential gluing (joint work with Arnaud Chéritat)

Abstract: Equipotential gluing is an alternative construction of mating, due to Jack Milnor. It gives a holomorphic motion of polynomial Julia sets, which is illustrated by movies of slow mating. In the postcritically finite situation, it is known to be equivalent to the Thurston Algorithm for the formal mating. Here it is shown that those Julia sets converge to the Julia set of the geometric mating. Moreover, at least in the hyperbolic case, the holomorphic motion is a pseudo-isotopy to the semi-conjugation, so the geometric mating is a conformal mating in the strongest sense.

• Araceli Bonifant : "Self-antipodal orbits in a family of antipode preserving maps":

In this talk I will describe one particular family, concentrating on those hyperbolic components which have self-antipodal attracting orbits. Every hyperbolic component in this family has a canonical conformal structure. Joint with X. Buff and J. Milnor.

• Matthieu Astorg : Collet, Eckmann and the bifurcation measure

Abstract :

Joint work with T. Gauthier, N. Mihalache and G. Vigny

The bifurcation measure is a finite measure in parameter space defined in terms of the Lyapunov exponent. Its support is strictly contained in the bifurcation locus, and in some sense corresponds to maximal bifurcations. We prove that this support has positive Lebesgue measure in the moduli space of degree d rational maps.

2