Afternoon talks

Tuesday:

- 15.15 to 15.45: Eva Uhre
- 16.00 to 16.30 Carlos Cabrera: *The classification of inverse limits associated to superattracting quadratic polynomials*
  Abstract: The main result is to prove that if two superattracting parameters are non conjugated. Then they have non homeomorphic inverse limits. The same result applies for the associated Lyubich-Minsky laminations.

Wednesday:

- 15.15 to 15.45: Helena Mihaljevic–Brant: *Hyperbolic type properties in a certain family of entire trascendental functions*
  Abstract: The talk will give an overview on already existing definitions of hyperbolicity and the corresponding topological properties of the Julia sets, which are known in the rational case. Furthermore, some problems arising in the transcendental case will be explained and possible extensions of the standard hyperbolicity-definition. Some equivalence-results known from the critically finite case can be extended to a bigger class of entire transcendental functions, including some examples.
- 16.00 to 16.30 Tania Garfias Macedo: *Dynamics of a family of exponential functions and its approximation by polynomials*
  Abstract: A special family of exponential functions has been studied in the dynamical plane, obtaining that the Fatou set contains exactly one Baker domain. This Baker domain contains all but at most one critical points, and therefore it may have one free critical point. We obtain the approximation by polynomials and study the parameter plane giving a class of components depending on the behaviour of the critical points (and eventually also of the free critical point). We try to get hyperbolic-type properties for these components.

Thrusday:

- 15.15 to 15.45: Jordi Taixés: *Connectivity of the Julia set for meromorphic functions*
- 16.00 to 16.30 Toni Garijo: *Capture zones for the family $f(z) = \lambda z^n e^z$*
  Abstract: We consider the family of entire transcendental maps given by $F_{\lambda,m}(z) = \lambda z^m \exp(z)$ where $m \geq 2$. All functions $F_{\lambda,m}$ have a super-attracting fixed point at $z = 0$, and a critical point at $z = -m$. In the parameter plane we focus on the capture behavior, i.e., λ values such that the critical point belongs to the basin of attraction of $z = 0$. In particular, we find a capture zone for which the boundary of the immediate basin of attraction of $z = 0$ in non locally connected, however for all others capture zones this boundary is a quasi-circle. Using a suitable family of polynomials we can explain this different behavior.