

1044-37-239

A. Blokh*, Dept of Math, UAB, Birmingham, AL 35294, **D. Childers**, UAB, **Lex Oversteegen**, UAB, **D. Schleicher**, Jacobs University, Bremen, Germany, and **G. Levin**, Hebrew University, Jerusalem, Israel. *Fatou-Douady-Hubbard-Shishikura inequality and wandering ray-continua*. Preliminary report.

Let P be a polynomial of degree d . Let ν be the number of cycles of Fatou domains plus the number of Cremer periodic orbits of P . By the Fatou-Douady -Hubbard-Shishikura inequality $\nu \leq d - 1$. Define a *ray continuum* K as a continuum or a point which is the union of impressions of some external rays to the Julia set J of P ; the maximal number of such rays is called the *valence* of K . A *wandering collection* (of ray continua) is a collection of wandering ray continua whose forward orbits are pairwise disjoint. Given a *non-empty* wandering collection Γ of non pre-critical ray continua with valences $M_1 > 2, \dots, M_k > 2$, we prove that $\sum_{\Gamma}(M_i - 2) + N \leq d - 2$. (Received September 02, 2008)