1054-11-233 **Jean-Louis Verger-Gaugry*** (jlverger@ujf-grenoble.fr), Institut Fourier, CNRS, Université de Grenoble I, BP 74, 38402 Saint-Martin d'Heres, France. *Equidistribution of Galois and beta-conjugates of Parry numbers near the unit circle.*

A Parry number $\beta > 1$ (ex - beta-number) is an algebraic integer for which the β-expansion of β in the sense of Rényi is finite or eventually periodic. Let (β_i) be a sequence of Parry numbers. We present a new equidistribution theorem for the conjugates of the Parry numbers β_i near the unit circle in Solomyak's fractal set based on a suitable notion of convergence of (β_i), and upon the theory of Erdős-Turán, improved by Amoroso and Mignotte, applied to the analytical function $f_{\beta_i}(z) = -1 + \sum_{j_i \geq 1} t_{j_i} z^i$, called Parry Upper function, associated with the Rényi β-expansion $d_{\beta_i}(1) = 0.t_{i_1} t_{i_2} t_{i_3} \ldots$ of unity. In the context of the dynamics of the beta-transformation, the Parry Upper function is simply correlated to the Artin-Mazur zeta function $\zeta_{\beta_i}(z)$, and is a rational fraction by a result of Szegő. This theorem is addressed to the union of the Galois conjugates and the beta-conjugates of all the β_is, not only to the Galois conjugates. When convergence occurs and the limit is 1, analogs in Arithmetic Geometry are Bilu's Theorem for the 1-dimensional torus and equidistribution Theorems for sets of conjugates in adelic conditions. (Received September 14, 2009)