

BALANCE AND EIGENVALUES FOR S-ADIC SUBSHIFTS

V. Berthé, *Univ. Paris 7, France*

We discuss balance and spectral properties of some S-adic shifts. These shifts are symbolic dynamical systems obtained by iterating infinitely many substitutions. Balance is a measure of convergence of Birkhoff sums toward frequencies, which is closely related to symbolic discrepancy. We focus on pure discrete spectrum for S-adic shifts under a generalized Pisot assumption, and on the case of dendric words which are defined in terms of combinatorial extension properties of factors in their language.