1046-37-1094 Andy Q. Yingst*, PO Box 889, Lancaster, SC 29721, and R. Daniel Mauldin. An Approach at the Binomial Transformation Problem. Preliminary report.

The binomial transformation (also known as the Pascal adic transformation) is a map defined on all but countably many points of $\{0,1\}^N$; by $T:0^i1^j10x\mapsto 1^j0^i01x$. It is known that the ergodic measures for T are precisely the Bernoulli trial measures, but it is unknown and has been of some interest in recent years whether T is weak-mixing for any of these measures.

We show that this question is equivalent to the existence of a bounded solution to a discrete recurrence relation, and we discuss methods of attack at this problem. (Received September 14, 2008)