

1046-11-142

**Eugen Andrei Ghenciu\*** (ffeag@uaf.edu), P.O. Box 750232, Fairbanks, AK 99775. *Polynomial Continued Fractions and Iterated Function Systems*. Preliminary report.

We investigate the connections between polynomial continued fractions and iterated function systems. For many continued fraction expansions (cf-expansions), one can associate a conformal iterated function system (CIFS). Depending on the particular form of the cf-expansion, the CIFS may or may not have overlaps. We ask several questions related to the geometric properties of the associated limit set and we look at some number theoretic applications. (Received August 06, 2008)