1145-37-146 **Mariusz Urbanski*** (urbanski@unt.edu), Department of Mathematics, University of North Texas, 1155 Union Circle #311430, Denton, TX 76203-5017, and **Vasilis Chousionis** and **Dmitry Leykehman**. *Dimension spectrum for complex and real continued fractions with restricted entries.*

In 1999 D. Mauldin and M. Urbański showed that if $\mathcal{S}$ is a conformal iterated function system with alphabet E and θ_S is its finiteness parameter, then

$$\mathrm{DimSp}(\mathcal{S}) := \{\mathrm{HD}(J_F) : F \subset E\}$$

the dimension spectrum of S, contains the interval $(\theta_S, \mathrm{HD}(J_S)]$. They conjectured that if $\mathcal{G}$ is the Gauss system, i.e. $\mathcal{G}$ consists of maps

$$[0,1] \ni x \mapsto \frac{1}{n+x} \in [0,1],\ n \in \mathbb{N},$$

then, the dimension spectrum of $\mathcal{G}$ is full: $\mathrm{DimSp}(\mathcal{S}) = [0,1]$.

In 2006 M. Kesseboehmer and S. Zhu named this conjecture Texan and proved it. D. Mauldin and M. Urbański considered in 1996 a direct complex analog $\mathcal{G}_{\mathbb{C}}$ of of the Gauss system. It consists of the maps

$$\overline{B}(1/2,1/2) \ni z \mapsto \frac{1}{b+z} \in \overline{B}(1/2,1/2),\ b \in E = \{m+ni : m \in \mathbb{N},\, n \in \mathbb{Z}\}$$

I will show that the spectrum of $\mathcal{G}_{\mathbb{C}}$ is also full, i.e.

$$\mathrm{DimSp}(\mathcal{G}_{\mathbb{C}}) = [0, \mathrm{HD}(J_{\mathcal{G}_{\mathbb{C}}})].$$

I will discuss fullness of spectrum for many subsets of E and methods of approximation of Hausdorff dimensions of the limit sets of J_F for arbitrary subsets of E. (Received August 08, 2018)