## 1172-28-320 Dmitry Drozdov\* (d.drozdov1@g.nsu.ru), Russia, and Andrei Tetenov (a.tetenov@gmail.com), Russia. On fractal cubes possessing finite intersection property.

Let  $n \ge 2$  and let  $D = \{d_1, \dots, d_N\} \subset \{0, 1, \dots, n-1\}^k$ . The set D and the integer n determine a system of contractions  $S = \{S_j(x) = \frac{1}{n}(x+d_j)\}_{j=1}^N$  in  $\mathbb{R}^k$ , whose attractor K satisfies the set equation nK = K + D and is called a fractal k-cube of order n.

We discuss the properties of projections, sections and intersection formulas for fractal cubes and find the conditions for the digit set D under which a fractal k-cube K possesses finite intersection property. We further apply them to find the conditions for D which ensure that K is a dendrite. (Received August 31, 2021)