

**Kynčl, Jan; Pach, János; Tóth, Géza**

**Long alternating paths in bicolored point sets.** (English) Zbl 1168.05320

Discrete Math. 308, No. 19, 4315-4321 (2008).

Summary: Given  $n$  red and  $n$  blue points in convex position in the plane, we show that there exists a noncrossing alternating path of length  $n + c\sqrt{n/\log n}$ . We disprove a conjecture of Erdős by constructing an example without any such path of length greater than  $4/3n + c'\sqrt{n}$ .

**MSC:**

05C38 Paths and cycles

05C15 Coloring of graphs and hypergraphs

Cited in **2** Reviews

Cited in **7** Documents

**Keywords:**

noncrossing alternating path; bicolored point set

**Full Text:** [DOI](#)

**References:**

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