

## **RAMSEY UPPER DENSITY OF INFINITE GRAPHS**

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**Time: Thursday, Apr. 22nd, 14:00 - 15:00**

**Zoom meeting ID: 867 6410 7277 Password: 121323**

**Link: <https://zoom.com.cn/j/86764107277>**

**Abstract:** Let  $H$  be an infinite graph. In a two-coloring of the edges of the complete graph on the natural numbers, what is the densest monochromatic subgraph isomorphic to  $H$  that we are guaranteed to find? We measure the density of a subgraph by the upper density of its vertex set. This question, in the particular case of the infinite path, was introduced by Erdős and Galvin. Following a recent result for the infinite path, we present bounds on the maximum density for other choices of  $H$ , including exact values for wide classes of bipartite graphs and infinite factors.