DISCRETE MATHEMATICS SEMINAR

Non-measurable colourings avoiding large distances

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Abstract: In 1983, Furstenberg, Katznelson, and Weiss proved that for every finite measurable colouring of the plane, there exists a d_0 such that for all $d \ge d_0$ there is a monochromatic pair of points at distance d. In contrast to this, we show that there is a finite colouring avoiding arbitrarily large distances. This is joint work with Rutger Campbell.

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