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*Metric spaces with point character equal to their size*

Comment.Math.Univ.Carolin. 51,3 (2010) 459–467.

**Abstract:** In this paper we consider the point character of metric spaces. This parameter which is a uniform version of dimension, was introduced in the context of uniform spaces in the late seventies by Jan Pelant, *Cardinal reflections and point-character of uniformities*, Seminar Uniform Spaces (Prague, 1973–1974), Math. Inst. Czech. Acad. Sci., Prague, 1975, pp. 149–158. Here we prove for each cardinal  $\kappa$ , the existence of a metric space of cardinality and point character  $\kappa$ . Since the point character can never exceed the cardinality of a metric space this gives the construction of metric spaces with “largest possible” point character. The existence of such spaces was already proved using GCH in Rödl V., *Small spaces with large point character*, European J. Combin. **8** (1987), no. 1, 55–58. The goal of this note is to remove this assumption.

**Keywords:** point character, uniform cover, continuum hypothesis, Specker graph.

**AMS Subject Classification:** 05C12, 05C15, 54A99, 54A25, 03E05

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