

Iwao Yoshioka

On spaces with point-countable k -systems

Comment.Math.Univ.Carolinae 45,4 (2004) 749-765.

Abstract: This paper deals with the behavior of M -spaces, countably bi-quasi- k -spaces and singly bi-quasi- k -spaces with point-countable k -systems. For example, we show that every M -space with a point-countable k -system is locally compact paracompact, and every separable singly bi-quasi- k -space with a point-countable k -system has a countable k -system. Also, we consider equivalent relations among spaces entered in Table 1 in Michael's paper [15] when the spaces have point-countable k -systems.

Keywords: countably-bi-quasi- k -space, point-countable k -system, local compactness, metrizability

AMS Subject Classification: 54D55, 54E18, 54E35