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Santi Spadaro* (spadasa@auburn.edu), Department of Mathematics and Statistics, 221 Parker Hall, Auburn University, Auburn, AL 36849. *The discrete charme of some Baire spaces.*

Let $\Delta(X)$ be the least cardinality of a non-empty open set in a space X . Say that a cardinal κ is *small* relative to X if $\kappa < \Delta(X)$.

We will prove that no Baire metric space can be covered by a small number of discrete sets (generalizations will also be given).

We will then apply our results to give several partial answers to a question of Juhász and Szentmiklóssy asking whether it's true that no compact space can be covered by a small number of discrete sets.

Finally, we will show examples of good Baire spaces (including a normal Baire Moore space), that can be covered by a small number of discrete sets. (Received August 31, 2008)