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Lonely points revisited

Comment.Math.Univ.Carolin. 54,1 (2013) 105 –110.

Abstract: In our previous paper, we introduced the notion of a lonely point, due to P. Simon. A point $p \in X$ is lonely if it is a limit point of a countable dense-in-itself set, it is not a limit point of a countable discrete set and all countable sets whose limit point it is form a filter. We use the space $\mathcal{G}_\omega$ from a paper of A. Dow, A.V. Gubbi and A. Szymański [*Rigid Stone spaces within ZFC*, Proc. Amer. Math. Soc. **102** (1988), no. 3, 745–748] to construct lonely points in ω^*. This answers the question of P. Simon posed in our paper *Lonely points in* ω^*, Topology Appl. **155** (2008), no. 16, 1766–1771.

Keywords: $\beta\omega$, lonely point, weak P-point, irresolvable spaces
AMS Subject Classification: Primary 54D80, 54D40, 54G05

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