spectral space

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A topological space is called *spectral* if

- it is compact,

- Kolmogorov (also called `http://planetmath.org/T0`T_0),

- compactness is preserved upon finite intersection of open compact sets, and

- any nonempty irreducible subspace of it contains a generic point

In his thesis, Mel Hochster showed that for any spectral space there is commutative unitary ring whose prime spectrum is homeomorphic to the spectral space.

References

[1] **M. Hochster**, "Prime Ideal Structure in Commutative Rings", Transactions of American Mathematical Society, Aug. 1969, vol. 142, p. 43-60