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*Radical ideals and coherent frames*

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**Abstract:** It follows from Stone Duality that Hochster's results on the relation between spectral spaces and prime spectra of rings translate into analogous, formally stronger results concerning coherent frames and frames of radical ideals of rings. Here, we show that the latter can actually be obtained without Stone Duality, proving them in Zermelo-Fraenkel set theory and thereby sharpening the original results of Hochster.

**Keywords:** coherent frame or locale, radical ideal, prime spectrum, spectral space, support on a ring, Boolean powers

**AMS Subject Classification:** 0F99, 13A10, 54D80, 54H99