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Brent J Holmes* (brentholmes@ku.edu). *A Generalized Serre Condition.*

Let R be a commutative Noetherian ring. A ring R satisfies Serre's condition (S_ℓ) if for all $\mathfrak{p} \in \text{Spec}R$, $\text{depth}R_{\mathfrak{p}} \geq \min\{\ell, \dim R_{\mathfrak{p}}\}$. Serre's condition has been a topic of expanding interest. In this talk, I will examine a generalization of Serre's condition (S_ℓ^j) . A ring satisfies (S_ℓ^j) when $\text{depth}R_{\mathfrak{p}} \geq \min\{\ell, \dim R_{\mathfrak{p}} - j\}$ for all $\mathfrak{p} \in \text{Spec}R$. I will present generalizations of results for rings satisfying Serre's condition. (Received August 09, 2018)