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Thomas G. Lucas*, Department of Mathematics & Statistics, University of North Carolina
Charlotte, Charlotte, NC 28223, and **Paul-Jean Cahen** and **David E. Dobbs**. *When is a proper
simple extension a minimal extension?*

For a pair of rings $R \subsetneq T$, T is said to be a minimal extension of R if there are no rings properly between R and T . A simple characterization of a minimal extension is that $T = R[t]$ for each $t \in T \setminus R$. Most of the previous work on minimal extensions has concentrated on characterizing when T is a minimal extension of R . We shift the focus from considering when $R \subsetneq T$ is a minimal extension to what properties characterize when a simple extension $R \subsetneq R[u]$ is minimal for a particular element $u \in T \setminus R$ (while perhaps $R \subsetneq R[w]$ is not minimal for some other $w \in T \setminus R$). The talk will focus on characterizing when $R \subsetneq R[u]$ is a closed minimal extension, meaning the extension is minimal and R is integrally closed in $R[u]$ (but not necessarily integrally closed in T). (Received February 04, 2009)