

1086-16-2574 **Susan J. Durst*** (sdurst@math.rutgers.edu). *Algebras Associated to Ranked Posets.*

Given a poset P , there exists an associated algebra $A(P)$, initially introduced for $P = 2^{[n]}$, the Boolean lattice, as a tool for studying the behavior of the pseudoroots of degree- n polynomials over non-commutative division rings. Here we will explore the structure of $A(P)$ for a wider class of ranked posets. In particular, we will discuss how the structure of P is reflected in the algebra $A(P)$, and present several classes of posets which are uniquely defined by their algebras $A(P)$. (Received September 25, 2012)