**Meeting:** 1001, Evanston, Illinois, SS 13A, Special Session on Algebraic Topology: Interactions with Representation Theory and Algebraic Geometry

1001-55-101 **Donald Y. Yau*** (dyau@math.uiuc.edu), Department of Mathematics, University of Illinois at Urbana-Champaign, 1409 W. Green Street, Urbana, IL 61801. *$\lambda$-ring structures over* $\mathbf{Z}[[x]]$.

I will talk about the following result: The $\lambda$-ring structure over $\mathbf{Z}[[x]]$ given by the $K$-theory of $\mathbf{CP}^\infty$ is uniquely determined by the condition, $\psi^p(x) \equiv px \pmod{x^2}$ for each prime $p$, where $\psi^p$ is the Adams operation. Applications to algebraic topology and formal group laws will also be discussed. (Received August 16, 2004)