1128-13-55 **Katharine Shultis*** (`shultis@gonzaga.edu`). *Systems of parameters and the Cohen-Macaulay property.*

Let $R$ be a commutative, Noetherian, local ring and $M$ a finitely generated $R$-module. Consider the module of homomorphisms $\mathrm{Hom}_R(R/\mathfrak{a}, M/\mathfrak{b}M)$ where $\mathfrak{b} \subseteq \mathfrak{a}$ are parameter ideals of $M$. When $M = R$ and $R$ is Cohen-Macaulay, Rees showed that this module of homomorphisms is always isomorphic to $R/\mathfrak{a}$. Recently, K. Bahmanpour and R. Naghipour showed that if $\mathrm{Hom}_R(R/\mathfrak{a}, R/\mathfrak{b})$ is isomorphic to $R/\mathfrak{a}$ for *every* pair of parameter ideals $\mathfrak{b} \subseteq \mathfrak{a}$ then $R$ is Cohen-Macaulay. In this talk, we will discuss the structure of $\mathrm{Hom}_R(R/\mathfrak{a}, M/\mathfrak{b}M)$ for general $M$, focusing on the case when $M = R$ and $R$ is a quotient of a power series ring. (Received February 08, 2017)