1035-13-688 **Nicholas R Baeth*** (baeth@ucmo.edu), Department of Mathematics and CS, W. C. Morris 222, University of Central Missouri, Warrensbug, MO 64093. *Direct Sum Decompositions over Two-dimensional Local Domains.*

Given a ring R and a class $\mathcal{C}$ of R-modules it is natural to ask whether or not every element of $\mathcal{C}$ decomposes uniquely as a direct sum of indecomposable elements of $\mathcal{C}$. If not, then we can further ask if it is possible for an element of $\mathcal{C}$ to decompose both as the direct sum of s indecomposable elements of $\mathcal{C}$ and as the direct sum of t indecomposable elements of $\mathcal{C}$ where $s \neq t$. In this talk we investigate these questions when R is a two-dimensional analytically normal domain and $\mathcal{C}$ is the class of finitely generated torsion-free R-modules. (Received September 13, 2007)