

1047-13-179

Jason McCullough* (jmccullo@math.uiuc.edu), Department of Mathematics, UIUC, 273
Altgeld Hall, MC-382, 1409 W. Green Street, Champaign, IL 61801-2975. *On the Strong Direct
Summand Conjecture.*

Let R be a regular local ring and let A be a module-finite extension of R . Ranganathan's Strong Direct Summand Conjecture states that for every regular parameter $x \in R$ and every height one prime ideal Q in A lying over xR , the map $xR \rightarrow Q$ splits as a map of R -modules. In this talk I will discuss how the Strong Direct Summand Conjecture relates to the other Homological Conjectures. I will also present some special cases of this conjecture and the related Strong Monomial Conjecture. (Received January 28, 2009)