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**Kuei-Nuan Lin\*** (ku120@psu.edu), PA. *Cohen-Macaulay Rees Algebras of Modules*. Preliminary report.

Rees algebras of modules include multi-Rees rings, which correspond to the case where the module is a direct sum of ideals. They provide the rings of functions on the blow up of a scheme along several subschemes. We want to prove for Rees algebras of modules many of the results that have been obtained in the cases of ideals, the Cohen-Macaulayness of Rees rings. As it turns out the generalization from ideals to modules is not just a routine generalization, but requires a great deal of technical development. We use the technique of generic Bourbaki ideals introduced by Simis, Ulrich and Vasconcelos to obtain the Cohen-Macaulayness of Rees algebras of modules. (Received January 09, 2015)