

1112-12-95

**Vivek Mukundan\*** (vmukunda@purdue.edu), 150 N. University Street, Office 1037, West Lafayette, IN 47906, and **Jacob A Boswell**. *Rees Algebras and Almost Linearly Presented Ideals*.

Consider a grade 2 perfect ideal  $I$  in  $R = k[x_1, \dots, x_d]$  which is generated by forms of the same degree. Assume that the presentation matrix  $\varphi$  is almost linear, that is, all but the last column of  $\varphi$  consist of entries which are linear. For such ideals, we find explicit forms of the defining ideal of the Rees algebra  $\mathcal{R}(I)$ . We also introduce the notion of iterated Jacobian duals and present properties such as Cohen-Macaulayness, regularity, relation type of the Rees algebra of ideals whose second analytic deviation is one. (Received August 08, 2015)