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Sarah Fleming, Lena Ji and Susan Loepf* (sloepf@williams.edu), Bronfman Science Center, 18 Hoxsey Street, Williamstown, MA 01267, and **Peter McDonald, Nina Pande and David Schwein.** *Dimensions of Formal Fiber Rings.* Preliminary report.

Let R be a local ring with maximal ideal M and let \widehat{R} denote the M -adic completion of R . It has long been known that the formal fiber rings of R encode important information about R . If P is a prime ideal of R , the formal fiber ring of R at P is defined to be $\widehat{R} \otimes_R k(P)$ where $k(P) = R_P/PR_P$. In this talk, we will discuss the dimensions of these formal fiber rings. We will give a history of known results as well as present new results. (Received September 16, 2015)