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**Andrew R. Kustin\*** ([kustin@math.sc.edu](mailto:kustin@math.sc.edu)), Mathematics Department, University of South Carolina, Columbia, SC 29208, and **Claudia Miller** and **Adela Vraciu**. *The resolution of the Frobenius module*. Preliminary report.

Let  $R$  be a ring containing the field of positive characteristic  $p$  and let  ${}^fR$  to represent the ring  $R$  endowed with an  $R$ -module structure given by the Frobenius automorphism  $f: R \rightarrow R$  with  $f(r) = r^q$ , where  $q = p^e$  for some fixed exponent  $e$ . We study the resolution of  ${}^fR$  by free  $R$ -modules. (Received February 13, 2006)