1085-11-35 Alexander Berkovich* (alexb@ufl.edu), Department of Mathematics, University of Florida, 358 Little Hall, Gainesville, FL 3626111. Rogers-Ramanujan functions, binary quadratic forms and eta-quotients.

In a handwritten manuscript published with his lost notebook, Ramanujan stated without proofs forty identities for the Rogers-Ramanujan functions. We observe that the function that appears in Ramanujan's identities can be obtained from a Hecke action on a certain family of eta products. We establish further Hecke-type relations for these functions involving binary quadratic forms. Our observations enable us to find new identities for the Rogers-Ramanujan functions and to find new identities involving binary quadratic forms. This talk is based on a joint work with H. Yesilyurt. (Received August 10, 2012)