

ON AN EXTENSION OF HERGLOTZ-ZAGIER FUNCTION

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ABSTRACT. Recently Radchenko and Zagier revived the theory of the Herglotz function. The Herglotz function appeared in the work of Herglotz and Zagier on the Kronecker limit formula. In this talk, we will discuss the arithmetic properties of an extension of the Herglotz-Zagier function, which also appears in the Kronecker limit formula. For example, we will present the two and three-term functional equations satisfied by it along with its special values. This is joint work with Professor YoungJu Choie.