1052-11-111 Youn-Seo Choi* (y-choi2@kias.re.kr), KIAS Hoegiro 87(207-43 Cheongnyangni 2-dong), Dongdaemun-gu, Seoul, 130-722, South Korea. understanding the mock theta functions through the basic bilateral hypergeometric series.

In 1893, M. Lerch introduced an interesting function which is defined in the form of the bilateral series. Later, G. N. Watson studied the relation between this Lerch's function and Ramanujan's fifth order mock theta functions with Lerch's function. In this talk, we will see the relation between the basic bilateral hypergeometric series and the mock theta functions which were introduced by S. Ramanujan and others. (Received August 24, 2009)