1145-11-1041   **Bruce C Berndt*** (`berndt@illinois.edu`), Department of Mathematics, University of Illinois, 1409 W. Green St., Urbana, IL 61801, **George E Andrews** (`andrews@math.psu.edu`), Dept. of Mathematics, Pennsylvania State University, University Park, PA, **Song Heng Chan** (`chansh@ntu.edu.sg`), School of Physical and Mathematical Sciences, Nanyang Technological University, 21 Nanyang Link, Singapore, Singapore, **Sun Kim** (`skim@uni-koeln.de`), Mathematical Institute, University of Cologne, Weyertal 86-90 50932, Cologne, Germany, and **Amita Malik** (`amita.malik@rutgers.edu`), Department of Mathematics, Rutgers University, 110 Frelinghuysen Rd, Piscataway, NJ 08854. *Identities for Third Order Mock Theta Functions from Ramanujan's Lost Notebook.*

Using the famous Atkin–Swinnerton-Dyer Lemma, Hamza Yesilyurt provided very nice proofs of four identities for third order mock theta functions found on pages 2 and 17 in Ramanujan's Lost Notebook. Since it is unlikely that Ramanujan used this Lemma from complex analysis, there is motivation to find proofs using the theory of q-series. In collaboration with George Andrews, Song Heng Chan, Sun Kim, and Amita Malik, such proofs have now been given. As corollaries, new relations for ranks are established. (Received September 18, 2018)