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**Holly Swisher\*** ([swisherh@math.oregonstate.edu](mailto:swisherh@math.oregonstate.edu)), Department of Mathematics, Kidder Hall 368, Oregon State University, Corvallis, OR 97331, and **Sharon Garthwaite**, **Soon-Yi Kang** and **Stephanie Treneer**. *Mock and false theta functions arising from eta-quotients.*

In a recent paper, Lemke-Oliver classifies those eta-quotients which are theta functions. Using work of Zwegers, for each of the weight  $1/2$  eta-quotients  $f(\tau)$  listed by Lemke-Oliver we construct a set of mock theta functions with shadow  $f(\tau)$ . Here, we investigate the mock theta function and shadow pairs, and in particular their false theta counterparts. (Received December 13, 2011)