1105-11-286   **Matthew Boylan*** (`boylan@math.sc.edu`), Mathematics Department, University of South Carolina, 1523 Greene Street, Columbia, SC 29208. *Arithmetic properties of a distinguished subspace of modular forms.* Preliminary report.

Subspaces of modular forms obtained as multiples of fixed powers of the Dedekind eta-function by modular forms on the full modular group with fixed weight arise in the study of arithmetic properties of partition-theoretic functions. I will discuss the image of Hecke operators on these subspaces both in characteristic zero and modulo primes p. As an application, I will give congruences between images of the Shimura map when the subspaces have half-integral weight. (Received September 22, 2014)