## 962-11-1211 Susan Hammond Marshall\* (susan@math.arizona.edu). Finite representations and Fermat curves. Preliminary report.

We present results concerning finite subrepresentations of *p*-adic Galois representations associated to Jacobians of Fermat curves defined over  $\mathbb{Q}_p(\zeta_p)$  (where by a *finite* representation we mean one that is isomorphic to the geometric points of a finite-flat group scheme defined over  $\mathbb{Z}_p[\zeta_p]$ ). (Received October 02, 2000)