1106-11-403 **Taisong Jing*** (tuj10@psu.edu), Department of Mathematics, The Pennsylvania State University, 107 McAllister Building, University Park, PA 16802. *The reductions of finite subgroups of CM abelian varieties.*

Let L be a CM field. CM abelian schemes with L-action over a (0,p) mixed characteristic complete discrete valuation ring with algebraically closed residue field are classified up to L-linear isogeny by the p-adic CM type. If we further require the full ring of integers $\mathcal{O}_L$ to act on the abelian scheme, then the p-adic CM type determines the L-linear isomorphic type. Under certain assumptions on such CM abelian schemes, we give a description on the reductions of their finite locally free subgroup schemes. This work has applications in the CM lifting problem for abelian varieties. (Received August 27, 2014)