

Abstract Submitted  
for the APR14 Meeting of  
The American Physical Society

**Study of  $B^\pm \rightarrow \pi^\pm \pi^\mp \pi^\pm$  at Belle** YAO LI, Virginia Tech, BELLE COLLABORATION — Decays of B mesons to three-body charmless final states probe the properties of the weak interaction through their dependence on the complex quark couplings in the CKM matrix. They also test dynamical models for hadronic B decays. Based on a sample of  $(771.581 \pm 10.566) \times 10^6$   $B\bar{B}$  pairs collected by the Belle experiment at  $\sqrt{s} = 10.58\text{GeV}$ , we present a study of direct CP nonconservation in  $B^\pm \rightarrow \pi^\pm \pi^\mp \pi^\pm$ .

Leo Piilonen  
Virginia Tech

Date submitted: 10 Jan 2014

Electronic form version 1.4