## Abstract Submitted for the SES14 Meeting of The American Physical Society

Study of  $B^{\pm} \to \pi^{\pm}\pi^{\mp}\pi^{\pm}$  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  $\sqrt{s} = 10.58 GeV$ , we present a study of direct CP nonconservation in  $B^{\pm} \to \pi^{\pm}\pi^{+}\pi^{-}$ .

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