Abstract Submitted for the HAW09 Meeting of The American Physical Society

Lattice calculations of the nucleon form factors in full QCD MEIFENG LIN, Massachusetts Institute of Technology, LATTICE HADRON PHYSICS COLLABORATION — We present recent results for the nucleon form factors from lattice simulations by the LHP Collaboration using the chirally symmetric domain wall fermions at pion masses as light as 300 MeV. The improved numerical techniques and the access to the increasing national computing resources have allowed us to achieve unprecedented precisions in these full QCD calculations. We investigate phenomenological fits to the momentum transfer dependence of the form factors, and study chiral extrapolations using baryon chiral effective field theories. Results are compared with the experiment and challenges in these calculations are also discussed.

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Date submitted: 29 Jun 2009

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