

Abstract Submitted
for the APR11 Meeting of
The American Physical Society

Lorentz invariance in loop quantum gravity JORGE PULLIN,
Louisiana State University, SAEED RASTGOO, RODOLFO GAMBINI, Universi-
dad de la Republica Oriental del Uruguay — We reconsider the argument of Collins,
Perez, Sudarsky, Urrutia and Vucetich concerning violations of Lorentz invariance in
the context of loop quantum gravity. We show that even if one introduces a lattice
that violates Lorentz invariance at the Planck scale, this does not translate itself
into large violations that would conflict with experiment.

Jorge Pullin
Louisiana State University

Date submitted: 11 Jan 2011

Electronic form version 1.4