

FIG. 4: Integrated luminosity required for observation at 3σ and 5σ vs. $M_{Z'}$ for selected values of g'_1 at the LHC for $\sqrt{s} = 7$ TeV for (4a) electrons and (4c) muons and at the Tevatron ($\sqrt{s} = 1.96$ TeV) for (4b) electrons (muons require more than 10 fb⁻¹ and is, hence, not shown). Only allowed combinations of masses and couplings are shown.

TeV and 1.20(1.50) TeV at $5(3)\sigma$, using electrons and muons, respectively. For $\sqrt{s} = 10$ TeV the heaviest observable Z'_{B-L} boson is for $M_{Z'} = 1.8(2.4)$ TeV and $M_{Z'} = 1.7(2.3)$