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## Isospin-breaking effects for meson masses and HVP, from Lattice QCD + quenched QED

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Lattice calculations of the leading-order hadronic contribution to the muon  $g-2$ , from the hadronic vacuum polarisation, are approaching sub-percent level precision. At this level, it becomes important to consider corrections from isospin-breaking. Here, we include quenched QED in our simulations by stochastically generating U(1) gauge configurations and combining these with existing SU(3) gauge configurations. We will present some first results for meson masses and HVP using this method, obtained on a  $24^3 \times 64$ ,  $N_f=2+1$  ensemble using domain wall fermions. This calculation will be directly compared to the perturbative approach presented by Vera Gülpers.

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