Corrections for "A Supersymmetry Primer", version 7

The following is a list of known corrections to `hep-ph/9709356 v7`, January 2016. If you have one of the other versions, you can find the corresponding list of corrections at:
`http://www.niu.edu/spmartin/primer`
Please send any further corrections or suggestions to `spmartin@niu.edu`.

This list was last updated: June 28, 2021. So far there are only five corrections:

• In the second relation of eq. (4.9.1), Ω^a should be Ω^{a*}.
(Thanks to Fei Li.)

• Section 6.1, in the middle of the third full paragraph after the paragraph containing eq. (6.1.3), the expression for the squark-quark-gluino coupling is missing an asterisk on the squark field $\tilde{q}$.
(Thanks to Fei Li.)

• The parenthetical sentence at the end of the paragraph containing eq. (8.1.2) should not include "b," and "$\langle H_d \rangle$" should read "$\langle H_d^0 \rangle$". So the sentence should read:

"(CP-violating phases in other couplings can induce loop-suppressed CP violation in the Higgs sector, but do not change the fact that $\langle H_u^0 \rangle$ and $\langle H_d^0 \rangle$ can always be chosen real and positive.)"

• Full paragraph between equations (8.2.5) and (8.2.6): it is incorrectly stated that one can always choose a convention such that M_1 and M_2 are both real and positive. That paragraph should be changed to read:

"In general, the parameters M_1, M_2, and μ in the equations above can have arbitrary complex phases. The phase of μ is physical and cannot be rotated away, because we have already used up the freedom to redefine the phases of the Higgs fields, since we have picked $\langle H_u^0 \rangle$ and $\langle H_d^0 \rangle$ to be real and positive; this guarantees that the off-diagonal entries proportional to m_Z in eq. (8.2.3) are real. A redefinition of the phases of the gaugino fields always allows us to choose a convention in which one of the gaugino masses, say M_2, is real and positive. Within that convention, the phases of the other two gaugino masses M_1 and M_3 are physical and cannot be rotated away, because any further phase rotation of the gaugino fields would modify the relative phases of the fermion-sfermion-gaugino couplings. However, if the phases are arbitrary, then there can be potentially disastrous CP-violating effects in low-energy physics, including electric dipole moments for both the electron and the neutron. Therefore, it is common (although not strictly mandatory, because of the possibility of nontrivial cancellations in the combinations appearing in physical observables) to assume that μ, M_1, and M_3 are real in the same set of phase conventions that make M_2, b, and the tree-level VEVs $\langle H_u^0 \rangle$ and $\langle H_d^0 \rangle$ real and positive. Note that even if the supersymmetry breaking mechanism imposes a gaugino mass unification condition like eq. (7.6.13) or eq. (7.7.17), so that M_1, M_2, and M_3 can all be chosen real and positive, the phase of μ is still undetermined by this constraint, and even if μ is assumed to be real, its sign is undetermined."
(Thanks to Andrew Fowlie.)

• First sentence of second paragraph of section 9.5: "charged lepton" should be "charged slepton".
(Thanks to Prudhvi Bhattiprolu.)