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Erratum to: Measurement of the W boson polarisation in $t\bar{t}$ events from pp collisions at $\sqrt{s} = 8$ TeV in the lepton + jets channel with ATLAS

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Erratum to: Measurement of the W boson polarisation in $t\bar{t}$ events from pp collisions at $\sqrt{s} = 8$ TeV in the lepton + jets channel with ATLAS

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A bug in the code used to calculate the total correlation coefficients between the W boson helicity fractions obtained using the leptonic analyser in semileptonic $t\bar{t}$ events in the region with ≥ 2 b -tags was found. It led to quoting incorrect correlation coefficients in the original paper.

The correct correlation coefficients are $\rho_{F_0, F_L} = -0.82$, $\rho_{F_0, F_R} = -0.97$ and $\rho_{F_L, F_R} = +0.65$. This change does not have any impact on the measured helicity fractions, but it changes the obtained limits on the anomalous couplings.

The correct limits on the anomalous couplings (Table 5) and the corresponding plots (Fig. 6a, b) are:

Table 5 Allowed ranges for the anomalous couplings V_R , g_L , and g_R at 95 % CL. The limits are derived using the measured W helicity fractions using the leptonic analyser for events with ≥ 2 b -tags (combination of the two channels, electron and muon)

Coupling	95 % CL interval
V_R	$[-0.17, 0.25]$
g_L	$[-0.11, 0.08]$
g_R	$[-0.03, 0.06], [0.74, 0.78]$

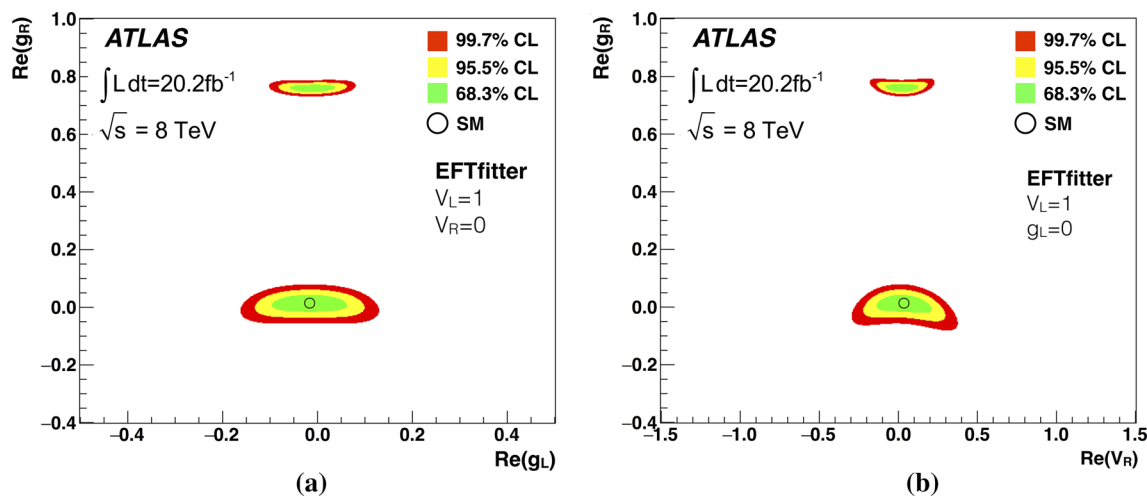


Fig. 6 **a** Limits on the anomalous left- and right-handed tensor couplings of the Wtb decay vertex as obtained from the measured W boson helicity fractions from the leptonic analyser. **b** Limits on the right-handed vector and tensor coupling. As the couplings are assumed to be real, the real part corresponds to the magnitude. Unconsidered couplings are fixed to their SM values

The original article can be found online at <https://doi.org/10.1140/epjc/s10052-017-4819-4>.

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