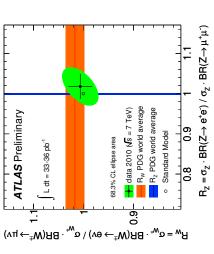
Theory comparisons - lepton universality

 \bullet New measurements of the ratios of the e and μ branching fractions

$$R_W = \frac{\sigma_W^e}{\sigma_W^{\mu}} = \frac{Br(W \to e\nu)}{Br(W \to \mu\nu)} = 1.006 \pm 0.004 \text{ (sta)} \pm 0.006 \text{ (unc)} \pm 0.023 \text{ (cor)} = 1.006 \pm 0.024$$

$$R_Z = \frac{\sigma_Z^e}{\sigma_Z^E} = \frac{Br(Z \to ee)}{Br(Z \to \mu\mu)} = 1.018 \pm 0.014 \text{ (sta)} \pm 0.016 \text{ (unc)} \pm 0.028 \text{ (cor)} = 1.018 \pm 0.031$$

- Inserting R_Z PDG value into the present measurement for a combined cross section analysis
- \Rightarrow reduction of correlated R_W systematic uncertainty
 - \Rightarrow improved result of $R_W = 0.999 \pm 0.021$.



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