CMS Internal $\hat{r} = 2.7 \pm 1.11$ CMS eff v 13TeV 1 XVZnnlp_eig0 2 3 XVZnnlp_eig3 XVZnnlp_eig4 5 CMS_XVZnnlp_norm_Main 6 CMS XVZnnlp altf Main 7 CMS_v_extr_13TeV 8 XVZnnlp_eig2 9 CMS_XVZnnhp_norm_Top 10 CMS_VV_p0_fit_13TeV 11 XVZnnlp eig1 XVZnnlp_eig5 12 13 CMS_XVZnnhp_altf_Main 14 CMS_Top_p1_fit_13TeV 15 CMS_VV_p1_fit_13TeV 16 XVZnnhp_eig0 XVZnnhp_eig1 17 18 CMS_jmr_13TeV 19 CMS_xsec_Top 20 CMS_QCDren_13TeV CMS_tau_13TeV 21 22 lumi_13TeV 23 CMS_XVZnnlp_norm_Top CMS_XVZnnhp_norm_Main 24 25 CMS_XVZnnhp_norm_VV 26 XVZnnhp_eig2 27 CMS_xsec_VV 28 CMS_XVZnnlp_norm_VV 29 CMS_btag_13TeV 30 XVZnnhp_eig3 -2 0 0 → Pull +15 Impact -15 Impact

CMS Internal $\hat{r} = 2.7 \pm 1.11$ 31 CMS_QCDfact_13TeV 32 XVZnnhp_eig4 33 CMS_sig_p1_jms_13TeV 34 CMS_jms_13TeV 35 CMS_VV_p0_imr_13TeV 36 CMS_sig_p1_jmr_13TeV 37 CMS_VV_p0_pileup_13TeV 38 CMS_scale_pu_13TeV 39 CMS_trig_13TeV 40 XVZnnhp_eig5 41 CMS PDF 13TeV CMS_sig_p2_jmr_13TeV 42 43 CMS_sig_p2_jms_13TeV 44 CMS_VV_p0_PDF_scale_13TeV 45 CMS_Top_p0_imr_13TeV 46 CMS_VV_p0_jms_13TeV CMS_VV_p0_jer_13TeV 47 48 CMS_VV_p0_uncl_13TeV 49 CMS_VV_p0_trigger_13TeV 50 CMS_Top_p0_trigger_13TeV 51 CMS_Top_p0_PDF_scale_13TeV 52 CMS_Top_p0_uncl_13TeV 53 CMS_VV_p0_jes_13TeV 54 CMS_Top_p0_jes_13TeV 55 CMS_VV_p0_QCD_fact_13TeV 56 CMS_Top_p0_jer_13TeV 57 CMS_Top_p0_jms_13TeV 58 CMS_Top_p0_pileup_13TeV 59 CMS_jes_13TeV 60 CMS_Top_p0_QCD_fact_13TeV 0.002 -2 -1 0 -0.0020 $(\hat{\theta} - \theta_0)/\Delta \theta$ → Pull +15 Impact -15 Impact

