Product type values

Encoding rescaled/product type values

- Branching fraction from **any measurement combination** can be encoded to dynamically adjust with the current best values

BR(report) * BR(known) = M (measurement)

Encoding BR(report):

br_adjust: M; *, ..., Location[BR(known)]

BR product example

br_adjust: **0.211+-0.030 +- 0.014 E-5**;

*, ADJUST, **M049 1**

$\Gamma(\Upsilon(1S)\pi^+\pi^-)/\Gamma_{total}$ **Γ_{17}/Γ**

VALUE (units 10^{-5})	*CL%*	*EVTS*	*DOCUMENT ID*	*TECN*	*COMMENT*
8.1±0.6 OUR AVERAGE					
$8.5\pm1.3\pm0.2$		113 ± 16	[19] SOKOLOV 09	BELL	$e^+e^-\to\pi^+\pi^-\mu^+\mu^-$
• • • We do not use the following data for averages, fits, limits, etc. • • •					
<12	90		GLENN 99	CLE2	e^+e^-

[19] SOKOLOV 09 reports $[\Gamma(\Upsilon(4S)\to\Upsilon(1S)\pi^+\pi^-)/\Gamma_{total}]\times[B(\Upsilon(1S)\to\mu^+\mu^-)] = (0.211\pm0.030\pm0.014)\times10^{-5}$ which we divide by our best value $B(\Upsilon(1S)\to\mu^+\mu^-) = (2.48\pm0.05)\times10^{-2}$. Our first error is their experiment's error and our second error is the systematic error from using our best value.

Adjust product example

br_adjust: **5.1 +-0.5 +-0.6 E-4**;

*, **9.33 +-0.14 +-0.61 E-2**, M071 59

$\Gamma(\eta\eta)/\Gamma_{total}$ **Γ_{23}/Γ**

VALUE (units 10^{-4})	*EVTS*	*DOCUMENT ID*		*TECN*	*COMMENT*
5.4±0.7±0.2	156± 14	[35] ASNER	09	CLEO	$\psi(2S) \rightarrow \gamma\eta\eta$

[35] ASNER 09 reports $(5.1 \pm 0.5 \pm 0.6) \times 10^{-4}$ from a measurement of $[\Gamma(\chi_{c2}(1P) \rightarrow \eta\eta)/\Gamma_{total}] \times [B(\psi(2S) \rightarrow \gamma\chi_{c2}(1P))]$ assuming $B(\psi(2S) \rightarrow \gamma\chi_{c2}(1P)) = (9.33 \pm 0.14 \pm 0.61) \times 10^{-2}$, which we rescale to our best value $B(\psi(2S) \rightarrow \gamma\chi_{c2}(1P)) = (8.74 \pm 0.35) \times 10^{-2}$. Our first error is their experiment's error and our second error is the systematic error from using our best value.