

COMMENTS ON "The OPE makes no sense in this DV scenario"

Excerpt from Tables 12,13 in PRS JHEP'22 (Pich's slide 20)

variation	Pert	$\mathcal{O}_{2(6+2),V+A}$	$\mathcal{O}_{2(8+3),V+A}$	DV	Exp
Default	0.0938 (5)	0.0029	-0.0019	-0.0001	0.0954 (3)
1	0.0952 (7)	-0.0001	-0.0004	-0.0000	0.0954 (3)

variation	Pert	$\mathcal{O}_{2(6+2),V+A}$	$\mathcal{O}_{2(8+3),V+A}$	DV	Exp
Default	0.1010 (18)	0.0248	-0.0326	0.0062	0.0994 (4)
1	0.1043 (28)	-0.0006	-0.0071	0.0028	0.0994 (4)

$V+A, W_{21} = 1 - 3x^2 + 2x^3$

$\left. \begin{matrix} \} s_0 = m_c^2 \\ \} \end{matrix} \right\} DV \left\{ \begin{matrix} \text{Default} \rightarrow e^{-\delta-\delta s} \sin(\alpha+\beta s) \\ \text{Model 1} \rightarrow s^8 \text{ Default} \end{matrix} \right.$

$\left. \} \right\} s_0 = 1.55 \text{ GeV}^2$

- There is nothing wrong with a $\sim 3\%$ condensate correction to Pert. Theory at $s_0 = m_c^2$ or a $\sim 20\%$ correction at $s_0 = 1.55 \text{ GeV}^2$. In fact, fits are done between these two scales: **Default model is OK!**
- Rest of PRS results in these tables based on contributions from \mathcal{O}_{12} and \mathcal{O}_{14} . **This is red herring, we never used those!**

- In fact, according to Pich & Rodriguez JHEP'22 : "model 1 shows acceptable s_0 behavior with \mathcal{OPE} contributions of reasonable size" but " \mathcal{OPE} of Default model makes no sense".
- How reasonable is it that contribution of $\mathcal{O}_8 \gg \mathcal{O}_6$ (at $s_0 = 1.55 \text{ GeV}^2$ even by one order of magnitude!) in a "convergent" \mathcal{OPE} ?

Pich's criticisms based on arbitrary (and inconsistent) standards

(P.S. Not to mention that numbers without errors are rather meaningless.)