➢ 快模拟chgRecEffScale

1M diy MC and 10M PHSP MC

与BESIII pub.相比全部都在 2.5σ 以内，绝大多数在 1–2σ 内

	Scale 0.6	Scale 0.8	Scale 1.0	Scale 1.2	Scale 1.4	Scale 1.6	Scale 1.8	Scale 2.0
$\alpha_{J/\psi}$	0.5691 ± 0.0462	0.5374 ± 0.0201	0.5750 ± 0.0100	0.5728 ± 0.0081	0.5710 ± 0.0077	0.5710 ± 0.0074	0.5808 ± 0.0071	0.5799 ± 0.0070
$\Delta\Phi$	1.4026 ± 0.2090	1.1219 ± 0.0615	1.2001 ± 0.0353	1.1843 ± 0.0273	1.2025 ± 0.0272	1.1914 ± 0.0251	1.2276 ± 0.0251	1.2272 ± 0.0251
α_{Ξ}	-0.3787 ± 0.0283	-0.3719 ± 0.0113	-0.3752 ± 0.0057	-0.3699 ± 0.0047	-0.3741 ± 0.0044	-0.3664 ± 0.0043	-0.3782 ± 0.0042	-0.3724 ± 0.0041
$\bar{\alpha}_{\Xi}$	0.3667 ± 0.0279	0.3832 ± 0.0114	0.3696 ± 0.0057	0.3763 ± 0.0047	0.3720 ± 0.0045	0.3735 ± 0.0043	0.3757 ± 0.0042	0.3698 ± 0.0041
α_{Λ}	0.6970 ± 0.0410	0.7610 ± 0.0174	0.7678 ± 0.0088	0.7457 ± 0.0071	0.7568 ± 0.0067	0.7449 ± 0.0065	0.7467 ± 0.0063	0.7501 ± 0.0062
$\bar{\alpha}_{\Lambda}$	-0.7161 ± 0.0422	-0.7361 ± 0.0171	-0.7372 ± 0.0086	-0.7519 ± 0.0071	-0.7495 ± 0.0067	-0.7599 ± 0.0066	-0.7527 ± 0.0063	-0.7624 ± 0.0063
ϕ_{Ξ}	-0.0453 ± 0.0866	-0.0772 ± 0.0318	-0.0259 ± 0.0160	-0.0109 ± 0.0131	-0.0049 ± 0.0123	0.0087 ± 0.0121	-0.0107 ± 0.0118	-0.0036 ± 0.0114
$\bar{\phi}_{\Xi}$	0.0244 ± 0.0833	0.0172 ± 0.0326	0.0250 ± 0.0160	0.0218 ± 0.0131	0.0084 ± 0.0123	0.0237 ± 0.0119	0.0186 ± 0.0116	0.0017 ± 0.0112
A_{CP}^{Ξ}	0.0161 ± 0.0553	-0.0149 ± 0.0216	0.0075 ± 0.0110	-0.0086 ± 0.0090	0.0028 ± 0.0085	-0.0096 ± 0.0084	0.0034 ± 0.0080	0.0034 ± 0.0080
A_{CP}^{Λ}	-0.0135 ± 0.0490	0.0167 ± 0.0191	0.0203 ± 0.0096	-0.0041 ± 0.0079	0.0048 ± 0.0074	-0.0100 ± 0.0073	-0.0039 ± 0.0070	-0.0082 ± 0.0069
$\Delta\phi_{CP}^{\Xi}$	-0.0104 ± 0.0607	-0.0300 ± 0.0237	-0.0004 ± 0.0115	0.0055 ± 0.0094	0.0018 ± 0.0088	0.0162 ± 0.0085	0.0039 ± 0.0083	-0.0009 ± 0.0080

外推

- Based on 1 million statistics to estimate the statistical errors of the parameters.
  - STCF expected J/ψ events: 3.4×10^{12}
  - Branch ratio of $J/\psi \to \Xi^-\bar{\Xi}^+$: 9.7×10^{-4}
  - Branch ratio of $\Xi^-(\bar{\Xi}^+) \to \Lambda\pi^-(\bar{\Lambda}\pi^+)$: 0.999
  - Branch ratio of $\Lambda(\bar{\Lambda}) \to p\pi^-(\bar{p}\pi^+)$: 0.639
- The expected events of $J/\psi \to \Xi^-\bar{\Xi}^+ \to \Lambda\pi^-\bar{\Lambda}\pi^+ \to p\pi^-\pi^-\bar{p}\pi^+\pi^+$ is about 1.34393×10^9.
- The scale factor can be defined: $\sqrt{1.0\times10^6/1.34939\times10^9} \approx 0.0272$

	Scale 0.6	**Scale 0.8**	**Scale 1.0**	**Scale 1.2**	**Scale 1.4**	**Scale 1.6**	**Scale 1.8**	**Scale 2.0**
A_{CP}^{Ξ}	1.50×10^{-3}	5.88×10^{-4}	2.99×10^{-4}	2.45×10^{-4}	2.31×10^{-4}	2.28×10^{-4}	2.18×10^{-4}	2.18×10^{-4}
A_{CP}^{Λ}	1.33×10^{-3}	5.20×10^{-4}	2.61×10^{-4}	2.15×10^{-4}	2.01×10^{-4}	1.99×10^{-4}	1.90×10^{-4}	1.88×10^{-4}
$\Delta\phi_{CP}^{\Xi}$	1.65×10^{-3}	6.45×10^{-4}	3.13×10^{-4}	2.56×10^{-4}	2.39×10^{-4}	2.31×10^{-4}	2.26×10^{-4}	2.18×10^{-4}