

- preparing my seminar at SLAC on July 25, ~1h long
- preparing my talk at DPF on July 30

< Tue 30/07 Wed 31/07 Thu 01/08 All days >	
Print PDF Full screen Detailed view Filter	
14:00	Physics at FCC-ee <i>Markus Klute</i> <i>Northeastern University</i> 14:00 - 14:23
	Status of the Circular Electron Positron Collider Project and Perspectives <i>Joao Barreiro Guimaraes Da Costa</i> <i>Northeastern University</i> 14:23 - 14:45
15:00	The global SMEFT fit at e+e- Higgs factories: What is the role of each measurement? <i>Dr Junping Tian</i> <i>Northeastern University</i> 14:45 - 15:08
	Higgs exotic decays at e+e- Higgs factories <i>Zhen Liu</i> <i>Northeastern University</i> 15:08 - 15:30

- finalizing my study for analytic solution of SMEFT
- today: one example for beam polarization reported in Madrid

recap 7: role of beam polarizations (e.g. at ILC/CLIC)

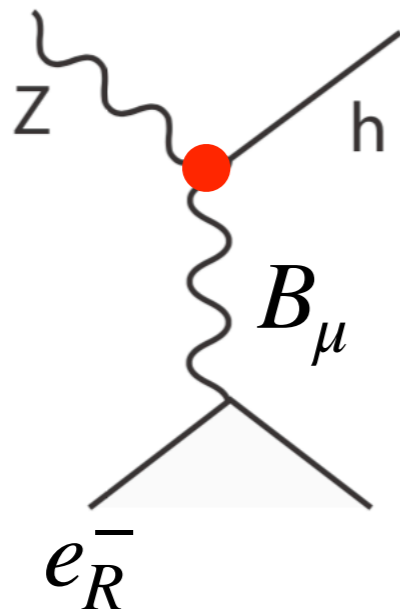
P(e ⁻ ,e ⁺)			
(-1,+1)	$\frac{g}{\cos \theta_w} \left(\frac{1}{2} - \sin^2 \theta_w \right)$	$g \sin \theta_w$	$\frac{g}{\cos \theta_w} (c_{HL} + c'_{HL})$
(+1,-1)	$\frac{g}{\cos \theta_w} (-\sin^2 \theta_w)$	$g \sin \theta_w$	$\frac{g}{\cos \theta_w} (c_{HE})$

- large cancellation in (+1,-1) -> weaker dependence on c_{ww}
- A_{LR} in σ_{ZH} -> improve c_{ww}, c_{HL}+c_{HL'} and c_{HE}

recap 7: role of beam polarizations ($e^+e^- \rightarrow Zh$)

$$\begin{aligned} \delta\sigma_L &= -c_H + 7.7(8c_{WW}) + \dots \\ \sqrt{s}=250 \text{ GeV} \quad \delta\sigma_R &= -c_H + 0.6(8c_{WW}) + \dots \quad \text{why?} \\ \delta\sigma_0 &= -c_H + 4.6(8c_{WW}) + \dots \end{aligned}$$

$(8c_{WW}) \sim 0.16\%$



contribution from
almost cancels out

$$\frac{g^2 c_{WW}}{m_W^2} \Phi^\dagger \Phi W_{\mu\nu}^a W^{a\mu\nu}$$