Structure of differential cross section (polarized target)

$$\sigma_{ep\to e\gamma p} = \sigma_{\rm BH} + e_\ell\,\sigma_{\rm INT} + P_\ell e_\ell\,\tilde\sigma_{\rm INT} + \sigma_{\rm VCS} + P_\ell\,\tilde\sigma_{\rm VCS}$$
$$+ S\big[P_\ell\,\Delta\sigma_{\rm BH} + e_\ell\,\Delta\tilde\sigma_{\rm INT} + P_\ell e_\ell\,\Delta\sigma_{\rm INT} + \Delta\tilde\sigma_{\rm VCS} + P_\ell\,\Delta\sigma_{\rm VCS}\big]$$

where polarization S can be longitudinal or transverse

beam charge	beam pol.	target pol.	combination
e^-	difference	none	$-\tilde\sigma_{\rm INT} + \tilde\sigma_{\rm VCS}$
difference	none	none	$\sigma_{\rm INT}$
difference	fixed	none	$P_\ell\,\tilde\sigma_{\rm INT} + \sigma_{\rm INT}$
e^-	none	difference	$-\Delta\tilde\sigma_{\rm INT} + \Delta\tilde\sigma_{\rm VCS}$
difference	none	fixed	$S\,\Delta\tilde\sigma_{\rm INT} + \sigma_{\rm INT}$
difference	fixed	fixed	$S\,\Delta\tilde\sigma_{\rm INT} + SP_\ell\,\Delta\sigma_{\rm INT} + P_\ell\,\tilde\sigma_{\rm INT} + \sigma_{\rm INT}$

so that with pol. target and

only pol. e^-	need Rosenbluth to separate $\Delta\tilde\sigma_{\rm INT}$ from $\Delta\tilde\sigma_{\rm VCS}$
unpol. e^- and e^+	can separate $\Delta\tilde\sigma_{\rm INT}$ from $\Delta\tilde\sigma_{\rm VCS}$
pol. e^- and pol. e^+	can separate $\Delta\tilde\sigma_{\rm INT}$ from $\Delta\tilde\sigma_{\rm VCS}$ and get $\Delta\sigma_{\rm INT}$