

$$\begin{array}{c} \gamma \\ \gamma \\ R \\ \gamma \\ \gamma \\ \gamma \\ ? \end{array}$$

$$\begin{array}{c} \gamma \\ \gamma \\ R_{\Psi_m}(\Delta S)? \\ \gamma \\ \gamma \\ ? \end{array}$$

$$\begin{array}{c} \gamma \\ \gamma_{112} \\ a_{1,\pm} \\ ? \end{array}$$

$$\begin{aligned} \gamma_{112} &\equiv \langle \cos(\phi_\alpha + \phi_\beta - 2\Psi_{RP}) \rangle \\ &= \langle \cos(\Delta\phi_\alpha) \cos(\Delta\phi_\beta) - \sin(\Delta\phi_\alpha) \sin(\Delta\phi_\beta) \rangle \\ &= (\langle v_{1,\alpha} v_{1,\beta} \rangle + B_{IN}) - (\langle a_{1,\alpha} a_{1,\beta} \rangle + B_{OUT}) \end{aligned}$$

$$\begin{array}{c} \alpha \\ \beta \\ ?? \\ \langle a_{1,\alpha} a_{1,\beta} \rangle a_{1,\pm} \\ \langle v_{1,\alpha} v_{1,\beta} \rangle \\ B_{IN} \\ B_{OUT} \\ \gamma_{112} \\ \Delta\gamma_{112} \equiv \gamma_{112}^{OS} - \gamma_{112}^{SS}, \\ (2) \\ B_{IN} - \\ B_{OUT} \Delta\gamma_{112} \\ ? \\ \gamma_{112} \\ a_1 \\ \Delta\gamma_{112} ? \\ ? \\ ? \\ ? \\ ? \end{array}$$

$$\begin{aligned} \delta &\equiv \langle \cos(\phi_\alpha - \phi_\beta) \rangle \\ &= (\langle v_{1,\alpha} v_{1,\beta} \rangle + B_{IN}) + (\langle a_{1,\alpha} a_{1,\beta} \rangle + B_{OUT}) \end{aligned}$$

$$\begin{array}{c} \langle a_{1,\alpha} a_{1,\beta} \rangle \\ \Delta\delta \\ \Delta\gamma_{112} ? \end{array}$$

$$\begin{aligned} \Delta\delta^{TMC} &\rightarrow -\frac{1}{N} \frac{\langle p_T \rangle_\Omega^2}{\langle p_T^2 \rangle_F} \frac{1 + (\bar{v}_{2,\Omega})^2 - 2\bar{v}_{2,F}\bar{v}_{2,\Omega}}{1 - (\bar{v}_{2,F})^2} (4) \\ \Delta\gamma_{112}^{TMC} &\rightarrow -\frac{1}{N} \frac{\langle p_T \rangle_\Omega^2}{\langle p_T^2 \rangle_F} \frac{2\bar{v}_{2,\Omega} - \bar{v}_{2,F} - \bar{v}_{2,F}(\bar{v}_{2,\Omega})^2}{1 - (\bar{v}_{2,F})^2} \\ &\approx \kappa_{112}^{TMC} \cdot v_{2,\Omega} \cdot \Delta\delta^{TMC}, \end{aligned} \tag{5}$$

$$\begin{array}{c} \kappa_{112}^{TMC} = \\ (2\bar{v}_{2,\Omega} - \\ \bar{v}_{2,F})/v_{2,\Omega} \\ \bar{v}_2 \\ \bar{v}_2 \\ \bar{v}_2^2 \\ p_T^2 \\ p_T^2 \Omega ?? \\ ?? \\ ? \\ v_2 \\ \Delta\delta \Delta\gamma \\ \kappa_{112} \equiv \frac{\Delta\gamma_{112}}{v_2 \cdot \Delta\delta}. \\ (6) \\ \kappa_{112}^{TMC/LCC} \kappa_{112}^{TMC/LCC} \\ \kappa_{112}^{TMC/LCC} \kappa_{112}^{TMC/LCC} \\ \Delta\gamma_{112} \kappa_{112} \\ \gamma \\ \kappa \\ \kappa_{112} ? \end{array}$$