

$$\gamma P \rightarrow K^+ K^- P$$

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- 1 Select data by VanHove Plot**
- 2 Fitting result**

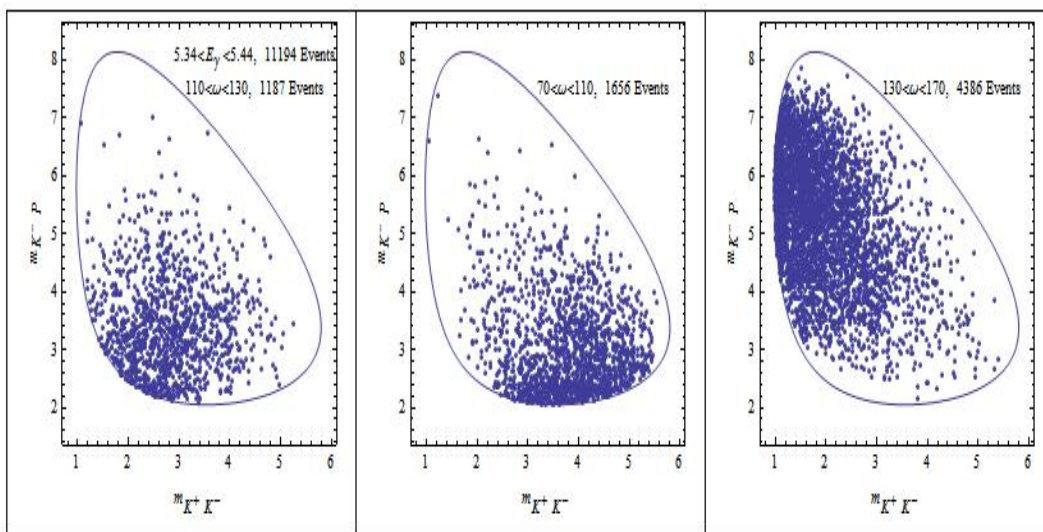
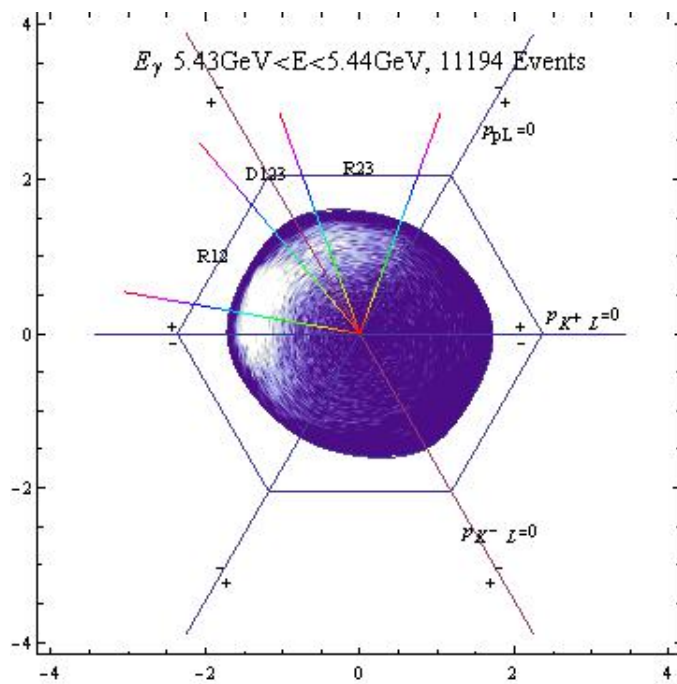


Figure 1: a: VanHove plot of data, D123, R23, R12 correspond double regge limit, single regge limit s_{23} and single regge limit s_{12} . b: Dalitz plot of D123, R23 and R12.

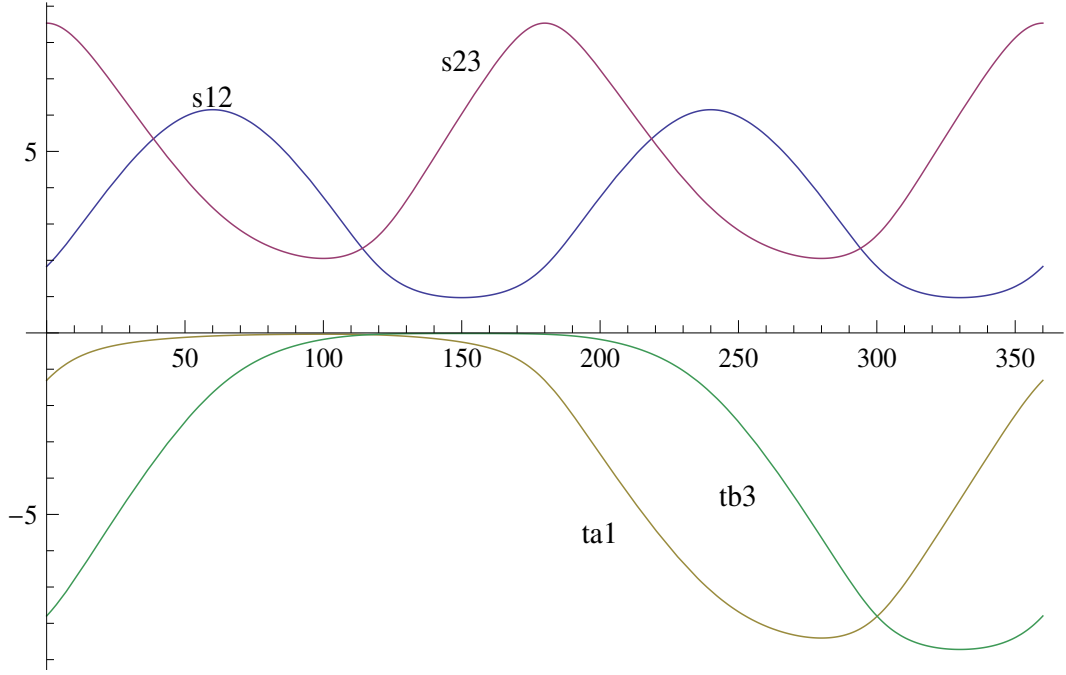


Figure 2: Mandelstam variables on function of angular ω . s_{ab} is fixed at 11.2GeV^2 ($E_\gamma = 5.5\text{GeV}$), and transverse momentum are also fixed, $r1 = r2 = r3 = 0.1\text{GeV}$. ω is defined by: $q_1 = \sqrt{\frac{2}{3}}q \sin \omega$, $q_2 = \sqrt{\frac{2}{3}}q(-\frac{1}{2} \sin \omega - \frac{\sqrt{3}}{2})$, $q_3 = \sqrt{\frac{2}{3}}q(-\frac{1}{2} \sin \omega + \frac{\sqrt{3}}{2})$, where $q = \sqrt{q_1^2 + q_2^2 + q_3^2}$.

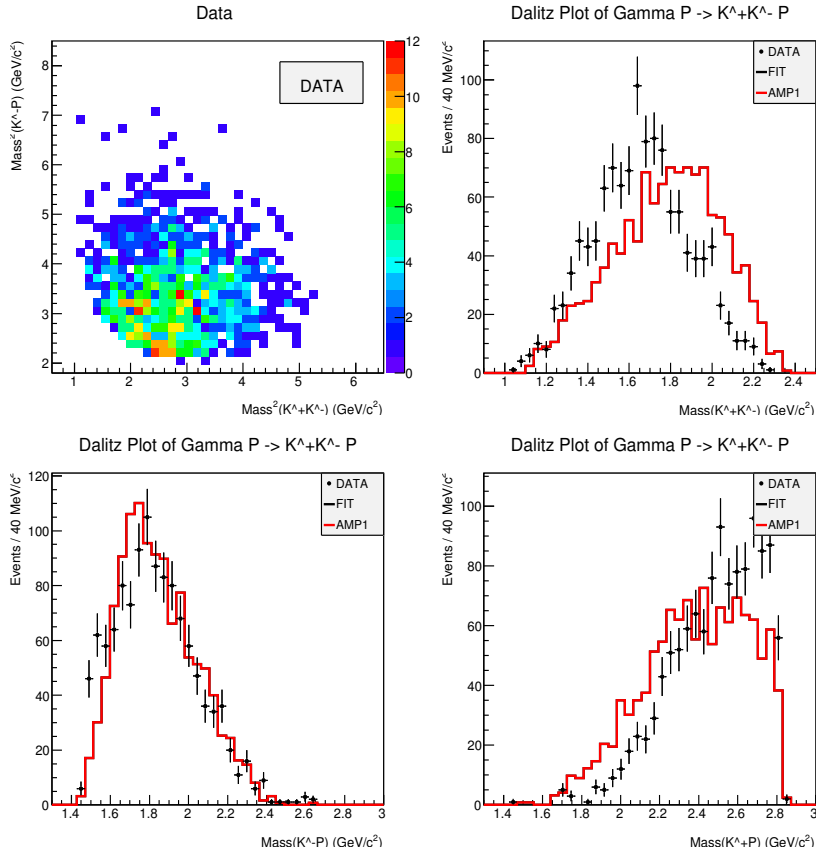


Figure 3: Double regge limit. The trajectories are: $\alpha_{ab} = -0.25 + 0.98s + 0.16i\sqrt{s - (ma + mb)^2}$ (fixed), $\alpha_{a1} = 0.12 + 0.87s$, $\alpha_{12} = 0.10 + 0.95 + 0.15i\sqrt{s - (m1 + m2)^2}$, $\alpha_{23} = -0.20 + 0.95 + 0.20i\sqrt{s - (m2 + m3)^2}$, $\alpha_{b3} = 0.48 + 0.86s$.

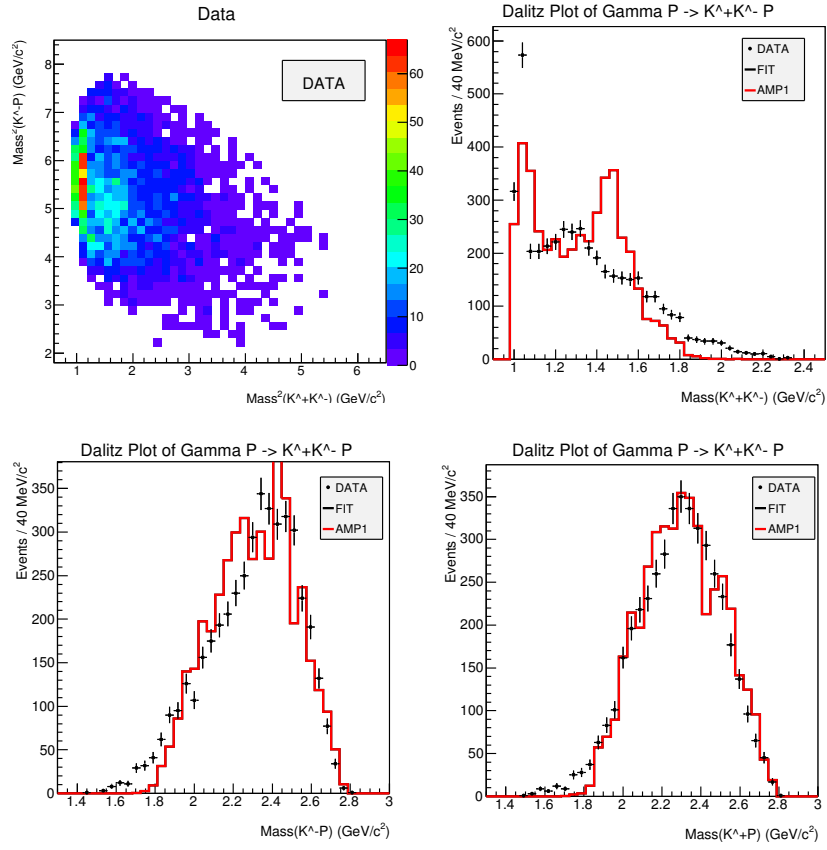


Figure 4: Single regge limit s_{12} . The trajectories are: $\alpha_{ab} = -0.15 + 0.98s + 0.16i\sqrt{s - (ma + mb)^2}$ (fixed), $\alpha_{a1} = 0.50 + 0.78i + 0.1i$, $\alpha_{12} = 0.09 + 0.86 + 0.20i\sqrt{s - (m1 + m2)^2}$, $\alpha_{23} = -0.90 + 0.85 + 0.10i\sqrt{s - (m2 + m3)^2}$, $\alpha_{b3} = 0.50 + 0.84s + 0.1i$.

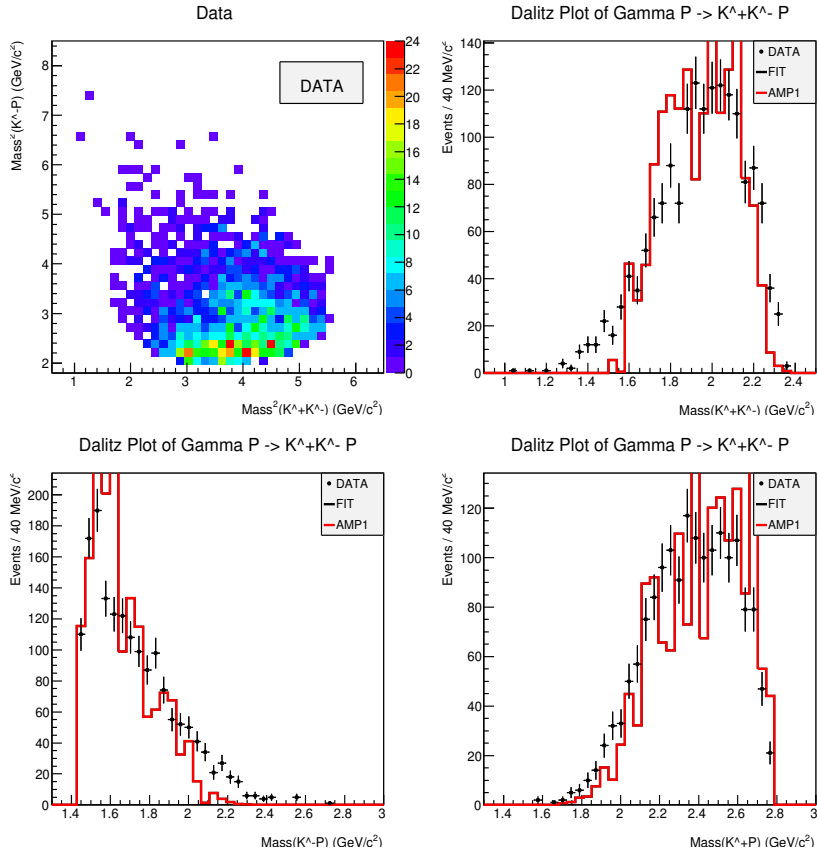


Figure 5: Single regge limit s_{23} . The trajectories are: $\alpha_{ab} = -0.35 + 0.98s + 0.16i\sqrt{s - (ma + mb)^2}$ (fixed), $\alpha_{a1} = 0.20 + 0.95s + 0.1i$, $\alpha_{12} = 0.05 + 0.85 + 0.20i\sqrt{s - (m1 + m2)^2}$, $\alpha_{23} = -1.0 + 0.85 + 0.20i\sqrt{s - (m2 + m3)^2}$, $\alpha_{b3} = 0.50 + 0.84s + 0.1i$.

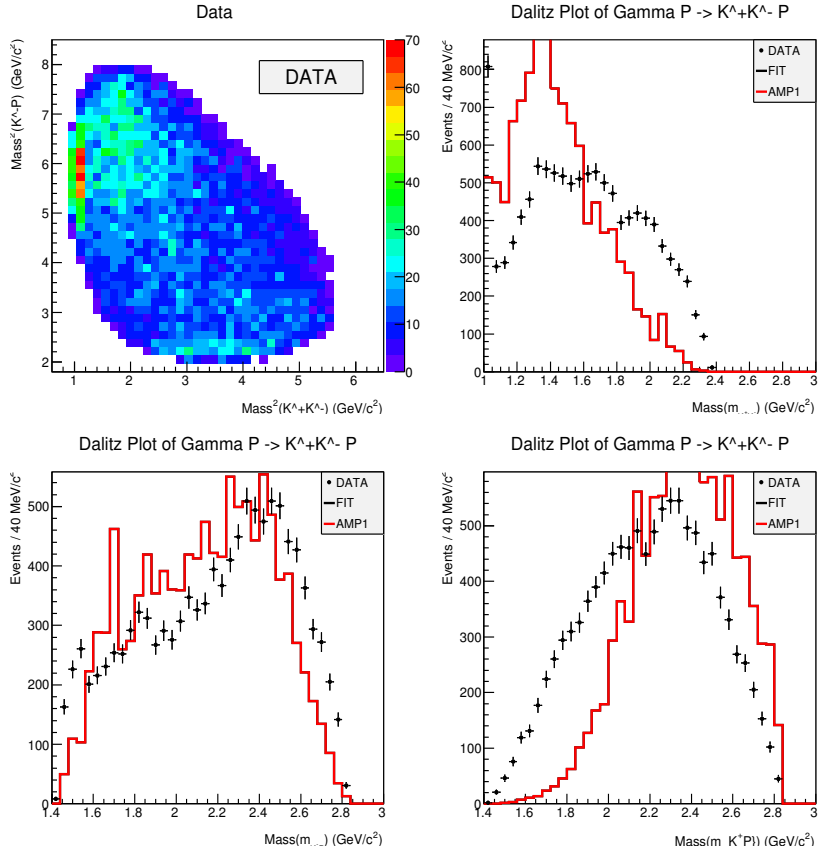


Figure 6: Fitting with the full amplitude. The trajectories are: $\alpha_{ab} = -0.35 + 0.98s + 0.16i\sqrt{s - (ma + mb)^2}$ (fixed), $\alpha_{a1} = 0.20 + 0.95s + 0.4i$, $\alpha_{12} = 0.07 + 0.85 + 0.27i\sqrt{s - (m1 + m2)^2}$, $\alpha_{23} = -0.2 + 0.94 + 0.21i\sqrt{s - (m2 + m3)^2}$, $\alpha_{b3} = 0.50 + 0.84s + 0.3i$.