## Supplementary material

This archive contains supplementary material that will posted on the public CDS record but will not appear in the paper. This consists of Figs. 1-12, which may be useful for conference speakers.



Figure 1: Distribution of  $m_{K\pi}^2$  in the  $D^0 \to K_s^0 K^- \pi^+$  mode with fit curves from the best **GLASS** model superimposed. The solid blue curve shows the full PDF  $P_{K_s^0 K^- \pi^+}(m_{K_s^0 \pi}^2, m_{K\pi}^2)$ . The dotted blue (red) curve shows the mistag (combinatorial) background contribution, and all other curves show isobar model components. Solid curves show direct contributions from particular resonances, while the dashed curves show interference terms. The purple curve labeled 'remainder' is an exception; this is the sum of all model contributions which are **not** drawn explicitly. The lower plot shows the normalized residuals  $\frac{d_i - m_i}{\sqrt{m_i}}$ , where  $d_i$  and  $m_i$  are the number of candidates and the fitted value in bin i.



Figure 2: Distribution of  $m_{K_S^0\pi}^2$  in the  $D^0 \to K_s^0 K^- \pi^+$  mode with fit curves from the best GLASS model superimposed. The caption of Fig. 1 describes the meaning of the various curves.



Figure 3: Distribution of  $m_{K_S^0K}^2$  in the  $D^0 \to K_S^0K^-\pi^+$  mode with fit curves from the best **GLASS** model superimposed. The caption of Fig. 1 describes the meaning of the various curves.



Figure 4: Distribution of  $m_{K\pi}^2$  in the  $D^0 \to K_s^0 K^- \pi^+$  mode with fit curves from the best LASS model superimposed. The caption of Fig. 1 describes the meaning of the various curves.

![](_page_5_Figure_0.jpeg)

Figure 5: Distribution of  $m_{K_S^0\pi}^2$  in the  $D^0 \to K_s^0 K^- \pi^+$  mode with fit curves from the best LASS model superimposed. The caption of Fig. 1 describes the meaning of the various curves.

![](_page_6_Figure_0.jpeg)

Figure 6: Distribution of  $m_{K_S^0K}^2$  in the  $D^0 \to K_s^0 K^- \pi^+$  mode with fit curves from the best LASS model superimposed. The caption of Fig. 1 describes the meaning of the various curves.

![](_page_7_Figure_0.jpeg)

Figure 7: Distribution of  $m_{K\pi}^2$  in the  $D^0 \to K_s^0 K^+ \pi^-$  mode with fit curves from the best **GLASS** model superimposed. The caption of Fig. 1 describes the meaning of the various curves.

![](_page_8_Figure_0.jpeg)

Figure 8: Distribution of  $m_{K_S^0\pi}^2$  in the  $D^0 \to K_s^0 K^+\pi^-$  mode with fit curves from the best GLASS model superimposed. The caption of Fig. 1 describes the meaning of the various curves.

![](_page_9_Figure_0.jpeg)

Figure 9: Distribution of  $m_{K_S^0K}^2$  in the  $D^0 \to K_S^0K^+\pi^-$  mode with fit curves from the best **GLASS** model superimposed. The caption of Fig. 1 describes the meaning of the various curves.

![](_page_10_Figure_0.jpeg)

Figure 10: Distribution of  $m_{K\pi}^2$  in the  $D^0 \to K_s^0 K^+ \pi^-$  mode with fit curves from the best LASS model superimposed. The caption of Fig. 1 describes the meaning of the various curves.

![](_page_11_Figure_0.jpeg)

Figure 11: Distribution of  $m_{K_S^0\pi}^2$  in the  $D^0 \to K_s^0 K^+\pi^-$  mode with fit curves from the best LASS model superimposed. The caption of Fig. 1 describes the meaning of the various curves.

![](_page_12_Figure_0.jpeg)

Figure 12: Distribution of  $m_{K_S^0K}^2$  in the  $D^0 \to K_S^0K^+\pi^-$  mode with fit curves from the best LASS model superimposed. The caption of Fig. 1 describes the meaning of the various curves.