Decay- $_{
m time}$ Acceptance The decaytime distribu- ${\rm tion}$ ofthe mesons issculpted due tothe geometry of the  ${\rm LHCb}$ de- $\mathrm{tec}\text{-}$ tor  $\quad \text{and} \quad$  $\quad \text{the} \quad$ applied selec- ${\rm tion}$ cuts, which aredescribedinSection ??. In particular, aný requirement on the flight  $\widetilde{\mathrm{dis}}$ tance (FD), the  $\operatorname{im}$ pact parame- $\operatorname{ter}$ (IP) or the direc- ${\rm tion}$ 

 $\begin{array}{c} \text{an-} \\ \text{gle} \\ (\text{DIRA}) \end{array}$ 

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    \frac{\dot{a}(t)^{observed}}{dt} = \frac{\dot{a}(t)^{theory}}{dt} \dot{a}(t);
(1)
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