

---

Response to Referee Report  
JHEP\_252P\_0420\_EDREP003650920

Once again, I wish to thank the referee for their insightful feedback. I have detailed my response to each of the referee's points below.

1. (a) Thank you for this observation. Yes, the expressions for the evolution of the amplitudes and phases do contain contributions from all-normalizable resonances at all times. I have added a comment below (3.7) to reinforce this, as well as addressed it in section 4.  
(b)  
(c)
2. (a) I have amended the abstract to limit the masses covered to those within the bounds of  $m_{BF}^2 < m^2 \leq 0$ .  
(b) I have included reference [26] at the end of page 5.  
(c) Yes, the “and” was intended to be an “an.” I have made the appropriate correction.  
(d) The duplication has been removed.  
(e) I have corrected  $T_\ell$  to  $\overline{T}_\ell$  above section 3.2.  
(f) Indeed, in these two cases  $S_\ell = \overline{T}_\ell$ . In later sections, however, we consider cases where  $S_\ell$  contains contributions from multiple resonant channels (e.g. Figures 3, 4, 5). In these cases  $S_\ell$  is the sum of these channels. Therefore, while the notation may seem redundant for early uses, I believe it provides consistency by always representing the sum of all resonant channels.  
(g) I agree that (2.21) is incorrect. In order to address this – as well as the comment regarding when  $S_\ell$  denotes secular terms, non-secular terms, or both – I have re-ordered the discussion at the end of section 2.2 to appear before the general expression for  $S_\ell$  in (2.2), and I have added a more in-depth explanation of secular terms following the discussion in [17]. Following this, equations (2.22 - 2.23) have been rewritten such that it is more clear that only secular terms from resonant frequencies are included.