The manuscipt "Interleaved Resonance Decays and Electroweak Radiation in the Vincia Parton Shower" details the implementation of a novel treatment of resonances decaying within an evolving parton shower, and further adding EW splittings for a full description of the evolution of a high-Q^2 system to a low-Q^2 system within the full Standard Model. The paper contains many novel and interesting ideas that should be published, given the authors have addressed a number of questions and issues.

1) On p. 3, where the authors are listing other parton shower formulations incorporating electroweak splitting functions. However, arXiv:1403.4788 and arXiv:2108.10817 (at the minimum) are missing. Please amend.

2) On p. 4, the authors mention the use of running widths for an improved phenomenological description of a propagator. However, running widths generally lead to gauge violations, in particular within the constrained parameters of the EW sector, in particular at distance from the resonance pole. Could the authors please add a brief discussion of this, since they mention running widths as a viable option also far away from the resonance.

   Similar comments are needed around eq. (3) in Sec. 2.1.

3) On p. 6, in the three definitions to define Q^2_{RES}, two of them imply that resonances with their most likely invariant mass, i.e. the peak of their Breit-Wigner distribution or pole mass m_0 are assigned a Q^2_{RES} in the vicinity of zero, and thus certainly smaller than the parton shower infrared cut-off. In physical terms, even though the resonance still has its nominal width soft gluons or photons would still be able to resolve it. Could the authors please comment on the physical reasoning behind these choices.

   Further, since $Q^2_{\mathrm{RES}} < Q_{\mathrm{cut}}$, the following question presents itself: For resonance like the top where the physical width is close to typical values of the parton shower cut-off Q_{cut}, this implies that a significant fraction of events reaches Q_{cut} in essentially the standard narrow-width approximation. Please comment.

4) Along the same lines, the authors comment on p. 8, end of Sec. 2.1, whether top quarks with off-shellnesses below 1 GeV should be allowed to hadronise. Given the shape of the Breit-Wigner distribution and a top quark width of about 1.3 GeV, this actually applies to a very significant fraction of the events. Could I invite the authors therefore to expand on the consequences of this speculation a little further?

5) On p. 9, Sec. 3.2, the authors detail their evolution variables, etc., for the EW splitting functions. However, it seems the quantities are only given for FF and II antennae. Is there a reason why no EW IF antennae are used?

6) On p. 12, Sec. 3.6 the overlap veto is discussed. It seems to me this is a topic relevant to constructing parton shower histories out of n-body final states. Could the authors please clarify its importance in pure parton shower forward evolution?

7) On p. 14, Fig. 3, what do the visible bands around the curves signify? Please detail.

8) On p. 15, Fig. 4, there is a typo in the right figure, I believe it should be $m > m_0 + 3\Gamma_0$.

9) On p. 20, Sec. 20, when validation their EW parton shower implementation in terms of the produced EW Sudakov logarithms, have the authors tried to validate them for more relevant physical theories against the known expression of Denner and Pozzorini, hep-ph/0010201 and hep-ph/0110114? This would help to identify whether in addition to the leading logarithms any of the different classes of subleading logarithms can be reproduced. In particular, in how far the authors approximate handling of spin is able to reproduce the spin-dependent subleading logarithms. In essence, a more detailed analysis of the results of Fig. 12 to this extent would greatly benefit the reader to gauge the reliability of this implementation.

10) On p. 23, which features of the EW shower and the fully coherent QED shower prohibit their simultaneous use? Please comment.