Response to Committee

Authors of Proposal

May 12, 2016

Physics Motivation

Work in progress. Intention to be completed by May 20, 2016.

Count Rate Estimates

Work in progress. Intention to be completed by May 20, 2016. However this issue needs clarification. Meeting has been requested.

Measurement

Work in progress. Intention to be completed by May 20, 2016.

Simulation

Work in progress. Intention to be completed by May 20, 2016.

Preliminary G12 results

The authors have added more information about the g12 η' analysis with regards to triggering, dilepton identification, sources of background and a summary of the Qfactor method. However, authors would like to point out that the Qfactor method was chosen for the g12 analysis as it is best suitable for low statics background subtraction.

Assorted typos rearrangements

Most of these comments have been implemented in the new version. Here is a list of what was not implemented with the authors reasoning.

- Comment about Figs. 4, 5.
  - The contamination is a function of when a photon traverses through matter, therefore the distance of the traveling dileptons does not provide additional information.
- Abstract: item b regarding 3rd paragraph
  - Authors feel that this requested change does not fit well within the context of the writing style.
- Motivation: item e regarding 3rd paragraph
  - Authors understand that this statement is general. We also are unclear of what the committee is proposing.
- Kinematics: item 2.1 regarding "expectation" $\rightarrow$ "diagram"

  - Authors feel that this change does not fit into the scope as it reads currently as "An example of QED expectation for η' is shown in...", the change would have it read "An example of QED diagram for η' is shown in..."

- Section 1.2: Regarding changing of title
  - Authors feel that this section not only describes the history of Dalitz decays but also transition form factors and should stay with current title.

- Section 2: Regarding changing of title
  - Authors feel that this section describes the most probable kinematics that will be needed to measure the transition form factor and should stay with the title "Kinematics"

- Section 2.3: Regarding moving this section to "Measurement"
  - Authors feel that this section is properly placed as the section is to inform the reader about the possible contamination. Furthermore, the authors would like to stress that this contamination is not only manageable but is also not relevant when measuring the transition form factor as the deviation from QED is expected at high $M(e^+e^-)$ masses.

- Last comment in reference to removing figures 10-11 and 12 or 13.
  - Authors have removed Figs. 10, 11. However, we feel that Figs. 12, 13 should remain as it is important to show that the acceptance of the e^+e^- is independent of the decay kinematics.

- Style of Tab. $\rightarrow$ Table was not implemented as it conflicts with AIP style.

Authors edits

- An edit was performed on Appendix A. There were typos found.