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Dear Editor,

again, we would like to thank the reviewer for the time spent with the manuscript.

The main critique of remains a concern of adequate novelty of our work in comparison with the one reported in Medea et al. (2016). We do believe that our work goes beyond confirmation of their findings, as we provide a better spectral resolution, and also present a method that allows to characterize the breakdown flash for a particular set of InGaAs APD that is easier to carry out, as our method does not require pulsed laser systems in comparison with the Medea work. Ultimately, every QKD system will have to document that this side channel is not a problem, and a simpler testing method is very important for such a purpose. Therefore, we would disagree with the referee's view that our work has very little to report.

In the revised version, we now give more credit to the Medea et al. work by pointing out in our conclusion that their conclusion is similar to ours.

As for the pre-production review comments, we could not find any references to figures that were wrongly put in parentheses, and that our use of parentheses complies with the stipulated use for referencing sub-figures. We also referenced all funding sources.

The summary of changes in this second revision:

- 1. We added an additional reference to the work of Medea et al. to the end of the second sentence in the last paragraph of the conclusion: "...information leakage through the breakdown flash in a quantum key distribution scenario, similar to findings in [18]." to emphasize their findings for InGaAs photodiodes.
- 2. We amended a reference to figure 2 in the 7th paragraph of section 2 now to refer to figure 2(b) instead of figure 2 only: "The events timing histogram is shown in Fig. 2(b)."

In summary, we hope to have addressed the concerns of the referee, and look forward for a consideration of publication in Optics Express.

Wit Best Regards on behalf of all authors,

Christian Kurtsiefer

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