

OC Protocol Jose

18th August 2019

1. Let's talk about noise. How do we determine the optimum decision threshold voltage for detection when considering electrical noise?
2. In a system in which thermal noise is negligible, What is the probability of detecting 0 photons when we send N photons?
3. What kind of semiconductor would you choose to make a photodiode?
4. What influences the transit time of a photodiode?
5. How would you improve the quantum efficiency of a photodiode?
6. Why does it not matter how long a edge-couple photodiode is?

Good luck with the exam!! Prof. Freude might ask you in a abstract way, if you don't understand something, do not hesitate in asking him to repeat the question again. If you draw graph, do it in the way they are in the script in order to avoid a pointless discussion about the position of the axis and losing time in that.