## **Massimo Robberto**

Subject: Fwd: Hadamard wizard

Date: Friday, July 8, 2022 at 8:11:51 PM Eastern Daylight Time

From: Kathleen Lorraine Oram <kxo3594@g.rit.edu>
To: Massimo Robberto <robberto@stsci.edu>

External Email - Use Caution

Hi Massimo,

Attached are e-mails between Jonathan and I regarding Hadamard mode with the SAMOS software.

I've also included <u>a link</u> to the python script I wrote to generate DMD mask patterns for Hadamard observations. The script calls a python class file which I've also attached. The class contains some of the functions I wrote for Hadamard related things. The only function within that class that you should need to run the mask generation script is "S\_matrix", which generates an S-matrix for mask construction.

https://drive.google.com/drive/folders/1odqPd6\_0B5AkPVYGmqn1qtmZT9M7kY2U?usp=sharing Please let me know if you have any questions!

Also- thank you for the quick feedback on the manuscript I sent the other day, I will send both you and Zoran an update shortly.

Thanks,

Kate

----- Forwarded message ------

From: Kathleen Lorraine Oram < <a href="mailto:kxo3594@g.rit.edu">kxo3594@g.rit.edu</a>>

Date: Tue, Aug 17, 2021 at 2:07 PM Subject: Re: Hadamard wizard

To: Jonathan Hoover < 12jonboy12@gmail.com>

## Perfect, thanks!

Yes I think just saving the spectral images to a new folder with the same name as the patterns with an added" spectral" sounds good.

One thing I didn't think of earlier is that there is a preferred order in which the DMD masks are loaded during the observations. Can the code include some sort of sort function to ensure that the masks are loaded onto the DMD in sequence? The file names of each mask image end in a number, so it would just need to go in numerical ascending order.

On Tue, Aug 17, 2021 at 1:40 PM Jonathan Hoover <12jonboy12@gmail.com> wrote:

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created a branch of the project so that I can keep these features in their own little separate version. since it's going to require all of the same options as the original you why I'm just adding another tab to the existing you I that lets you select the

folder that contains the patterns and start. the existing settings in the rest of the ui's what's going to be used to run the test.

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there's not really much added to the user interface.

have to start working on the underlying code.

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do you want the spectral images exported to, how about a new folder with the same name as the patterns except for "\_ spectral" added to it?

Sincerely

J

Hoover

Kate Oram

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