

Subject: Fwd: Help with SAT proposal
From: Christopher Walker <iras16293@gmail.com>
Date: 02/21/17 15:12
To: Craig Kulesa <ckulesa@as.arizona.edu>

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From: "Mehdi, Imran (389A)" <Imran.Mehdi@jpl.nasa.gov>
Date: Feb 21, 2017 4:58 PM
Subject: Help with SAT proposal
To: "Christopher Walker (cwalker@as.arizona.edu)" <cwalker@as.arizona.edu>
Cc: "Siles, Jose V (389A)" <Jose.V.Siles@jpl.nasa.gov>, "Kawamura, Jonathan H (389A)" <jonathan.h.kawamura@jpl.nasa.gov>

Hi Chris,

Hope your meeting at HQ went well today. Looking forward to hearing the good news.

As Jose mentioned to you, I am putting together a SAT proposal to build up a 16 pixel receiver module that covers 1.9 to 2.06 THz. It will use some of Jose's ideas to further reduce DC power consumption for the LO's and Jon's HEBs with low-power integrated first stage IF amps to reduce load on the 4K stage. I would like to invite you to be on the science advisory team and would also like to get a SOW and budget from you for the following two items:

1. Design, development and delivery of a 16 pixel bias electronics module. This module will bias the various LO components (synthesizer, power amps, multipliers, HEB, IF amps) and utilize feedback to adjust power from the LO chain.
2. Development and delivery of software that can control the bias module (with GUI interface).

I think this is very consistent with what your group has done for the STO, STO2 (and hopefully GUSTO). I am hoping with this technology development we can really push forward to large arrays and this should benefit the science you have been pushing for. Also, it will certainly make parts for STO-3 relatively less expensive if we already have the technology in hand.

Please let me know if this is of interest to you. Please feel free to spell out the SOW in detail. The proposal would be over three years and I would like to get the electronics and software from you by middle of second year. As you know the proposal is due March 17 but JPL management is asking for it by next week. If I can get a ROM from you by Thursday (or sooner) that would be good. Once we agree you will have to go back and do a real budget with University approval. Or if you prefer I can just keep it as a PO?

Best regards,

Imran

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