

## Joint Receiver Development Group - First meeting

Wild, Wade, Ellison, Lazareff, Belitsky (Güsten not present)  
 Webber, Plambeck, Lamb, Payne, Brown, Cunningham

Wild: general remarks about function of the JRDG:

decide receiver design at system level

make sure there is one design

define development framework + interfaces

define test plan

settle all design questions at system level

Wade: need to get enough preliminary agreement so that  
 work packages can be funded and work in Europe begun.

Wild showed list of things to be specified.

Discussion of status of European working groups

Discussion of specs

→ Calibration? Can we use the 4K resistors in the SBS mixers?

- LUNCH -

Payne: possible configurations

183 GHz rcvr is critical - separate dewar?  $300\text{K} = T_{\text{mix}} @ 77\text{K}$  for Schottky

Dewar material? IRAM going to Al. Al lighter but scratches easily  
 if not anodized (exposed exterior surfaces) and it contaminated with He  
 must be discarded

Inserts? Modules? IRAM has all optics as permanent parts  
 of cryostat - just remove electronics.

Modules would not include bias supply or LO.

Have different groups look at concepts, review in Feb or earlier.

→ Dec 2, 3 in Grenoble: concepts review, all are invited; but  
 try to minimize number of attendees. Invite Japanese.

Publish JR DG minutes etc. on web.

— BREAK —

Wild: straw man overall schedule (11 WBS items)

Wade: production must be done by industry where possible  
designate 2 or 3 regional centers which will be  
responsible for integration & test  
track everything for quality control

Work Packages: 1. What needs to be done

proposed WBS

Long discussion of SIS junctions - group in  
Europe wants to look at how to  
set up facility for mass production.

2. Who will do what - joint work plan

Wild & Payne have a proposal - but

who makes the decisions? JR DG? ACC?

Proposal just lists all the institutions who  
want to do a particular WBS item. Doesn't  
really resolve who does what - some funds  
are already in place & the organization  
will probably not take redirection from ALMA.

Belitsky is looking at FTS acquisition

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