Motivation & Strategy for this Workshop

Tony Readhead

July 21- July 25, 2008
MMIC Array Receivers and Spectrographs Workshop
Pasadena, California
Here at Caltech/JPL we have reached a critical decision point:

either

Continue efforts on MMIC Arrays with appropriate levels of funding

or

Discontinue these efforts and turn attentions to areas where it is possible to get appropriate levels of funding

Our hope is that we will find that the world-wide interest in the exploitation of this technology for cosmology and astrophysics is sufficient to fuel complementary efforts on MMIC arrays at a number of partner institutions and to develop a coherent, coordinated plan for doing this, which will enable us to exploit the enormous potential of these devices over the next 3-10 years.
Our key objective is a *Report* presenting a *Roadmap*
which lays out a:
detailed plan for the next 3 years
and a
less detailed provisional plan for the next decade.

**Report Organization**

Report Leader and Chief Editor is Tim Pearson

Discussion Leaders will be responsible for coordinating writing in their groups
Tuesday Afternoon Breakout Groups

Discussion and writing assignments

13:30-15:30
- Astrophysics I (K. Spalding 410 - Astrophysics) Goldsmith
- Astrophysics II (Spalding Lab 113 - CMB) Church
- Planetary Science (Robinson 023) Allen
- Earth Science (Robinson 012) Lambrigtsen

Reports on Discussions (Goldsmith, Church, Allen, Lambrigtsen) Chaired by Werner

16:00-18:00
- Devices (K. Spalding 410) Lai
- Modules (Robinson 023) Gaier
- Instruments (Robinson 012) Seiffert

Reports on Discussions (Lai, Gaier, Seiffert) Chaired by Seiffert
Wednesday

11:00-12:30  Discussion of Digital Backends and writing assignments - led by Ruf
14:00-15:30  Digital Backend Discussion (K. Spalding 410) Ruf
16:00-17:30  Writing
17:30-18:00  Reports on progress and problems (Goldsmith, Church, Allen, Lambrigtsen, Gaier, Seiffert, Ruf) Chaired by Lawrence

Thursday

Review of funding opportunities
Review of overall strategy - Chaired by Lawrence and Readhead
Friday

09:00-11:30  Writing
11:30-12:30  Discussion of Progress and Problems
14:00-15:30  Writing

Discussion of draft and future plans - chaired by Gaier
Summary of Workshop Goals

1. Identify breakthrough science enabled by large coherent arrays and hence also identify the critical parameters of MMIC arrays

2. Review current state of the art and assess potential for dramatic advances over the next 3 years and over the next ten years

3. Identify specific steps required and prototypes needed to realize potential of MMIC arrays (including estimate of scale and cost), with the objective of devising a Roadmap for key technological developments