



Markus Kissler-Patig

Director's Message

Welcome to Gemini!

My first 100 days as Director have elapsed in no time. In these last months of 2012, the Observatory is even busier than usual as we prepare to enter a new era. Indeed, the partnership with the United Kingdom is officially ending in December, and the next couple of years will serve to transition into a new partnership with the U.S. (now a 65 percent partner), Canada (19 percent), Brazil (7 percent), Australia (6 percent) and Argentina (3 percent), in addition to our hosts Chile and Hawai'i.

Some of the changes foreseen over the next couple of years will directly affect our users. With a reduced budget, the Observatory simply won't be able to deliver the same services that we have in the past. However, some of the planned changes are very likely to enhance the Observatory's scientific productivity by opening some new opportunities for users.

Indeed, we've already asked some queue observers to participate in our new "eavesdropping" program: When opting in, the nighttime observer at the telescope contacts the user while his or her observations are being conducted. With the help of a Skype® connection and a link to the archive, users can then assist in their queue observations, provide advice during the acquisition phase, and give immediate feedback on the acquired data.

Eavesdropping, together with the initiative to move nighttime operations to our base facilities (see also *GeminiFocus*, June 2011, page 4) constituted the pillars for implementing fully remote operations that will become available to users by the end of the transition phase in 2015. By then, users will be able to conduct classical observations from remote locations in their home countries.

Visiting Instrument Program

Another aspect of the new operation scheme is the revival of a vigorous visiting instrument program. As the number of facility-class instruments stabilizes at Gemini, the goal of the Observatory

remains to cover a strategically large fraction of the parameter space spanned by wavelength and spectral/spatial resolution. Niche instruments, those specialized to address a more specific science case, are often better and faster developed within the community. We recognize that the Gemini telescopes are most attractive for such tactical instrumentation, and we intend to encourage the deployment of visiting instruments on both telescopes.

A recent excellent example is the Differential Speckle Survey Instrument (DSSI) that visited the Gemini North telescope in September (see the article by Steve Howell and others in this issue). While mounted on Gemini, DSSI produced the sharpest-ever, ground-based images of Pluto and Charon: with 20 milliarcsecond resolution at a wavelength of 692 nanometers — outperforming any adaptive optics system on an 8-meter telescope. Similarly, the team that developed the Texas Echelon Cross Echelle Spectrograph (TEXES) may visit Gemini North again at the end of 2013.

Once proven to work reliably, we'll offer visiting instruments through the regular Call for Proposals to the entire community. This will broaden the science capabilities that Gemini can offer to its users. Teams interested in bringing their own instrument to the telescope are encouraged to contact us.

Call for Partnership Programs

Further enhancing Gemini's operations is the fact that Gemini users will soon be able to apply for partnership-wide, large/long programs. Indeed, following a recommendation by the Science and Technical Advisory Committee, the Gemini Board has recently given the green light for implementing a yearly call for large programs on Gemini. Key differences to the past possibilities are that the proposals will be submitted yearly to a separate common Time Allocation Committee. Up to 20 percent of available observing time will be allocated to this initiative.

This observing time will lose its "national flavor" by being offered to all users. These large/long programs are meant to encourage collaborations among the partnership and will make it a lot easier to conduct large ambitious projects at Gemini. We expect to see many high impact, world-leading programs emerge from this scheme and are excited about this new resource for our users.

Visiting instrument and large/long programs are the first enhancements that accompany the transition period. Even more exciting capabilities are to come.

Meanwhile, don't miss articles in this issue by our staff about recent science highlights, as well as instrumentation news, and an update on science operations.

If you missed the Gemini Users Meeting in San Francisco last July, make sure to catch up with what happened in the article by Pauline Barmby.

The report from the Science and Technology Advisory Committee (by its chair Henry Roe) will give you an overview of where the Observatory is heading with its instrumentation program. And Sarah Brough writes about the newly formed Gemini Users' Committee.

And, last but not least, read about Gemini's second annual high-profile local outreach program in Chile: "Viaje al Universo."

As 2012 reaches a close, we look forward to an exciting new year while saying goodbye to the United Kingdom as a partner, thanking them wholeheartedly for having supported the Gemini Observatory since its founding.

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