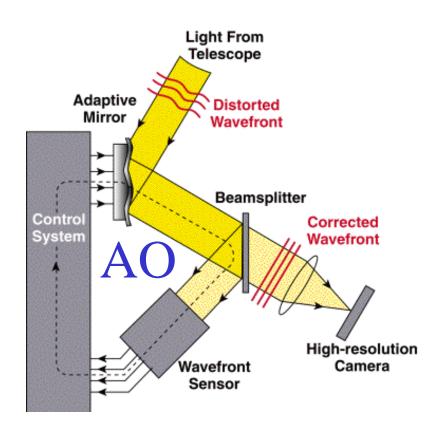


### A Quick Update On:





The MSIP Program

Theo ten Brummelaar CHARA Array Director























### The CHARA Array Adaptive Optics Program

























### .. And the winner is ..

- A contract was awarded to ALPAO for the six deformable mirrors for CHARA late last year.
- We expect the first mirror to be delivered late June of this year.
- The remaining mirrors will come by the end of this summer.
- If all goes well, we will close loop on the sky in a few months from now.















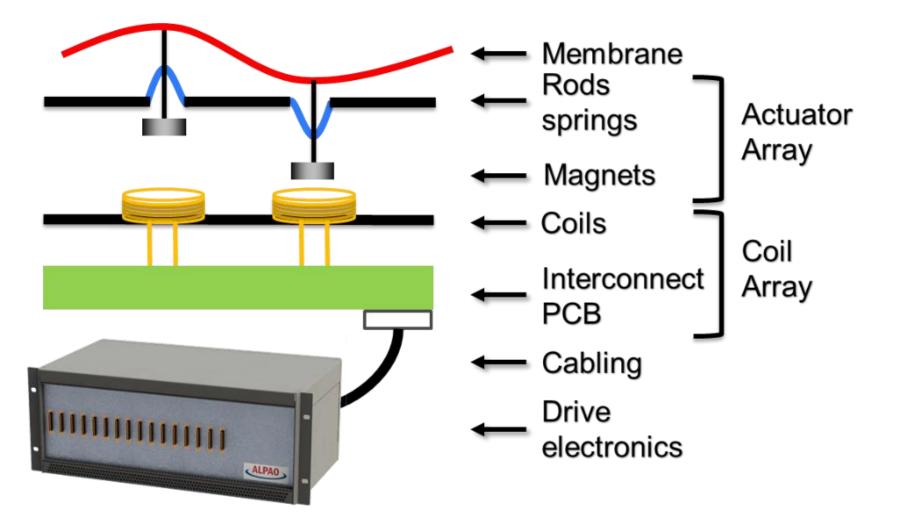








## ALPAO Technology

















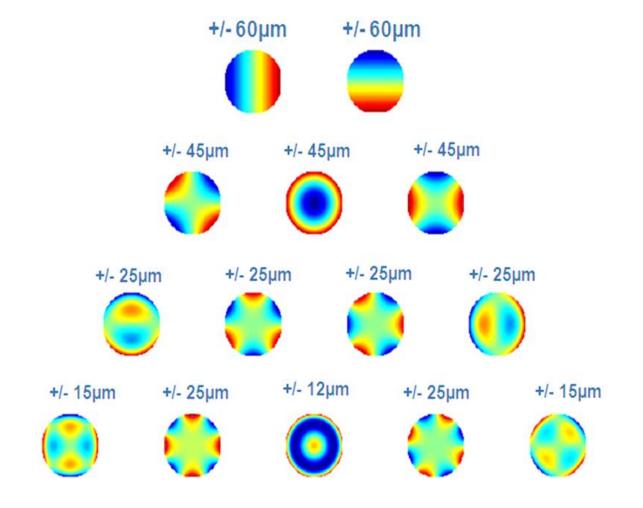








### DM Stroke – Peak to Valley (DM97-15)



















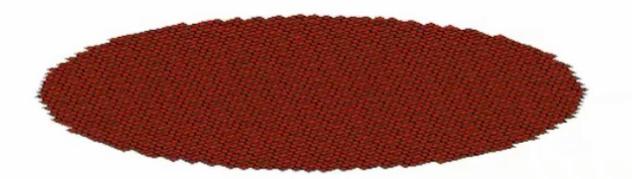






### **DM Speed:**

00.0 MS

















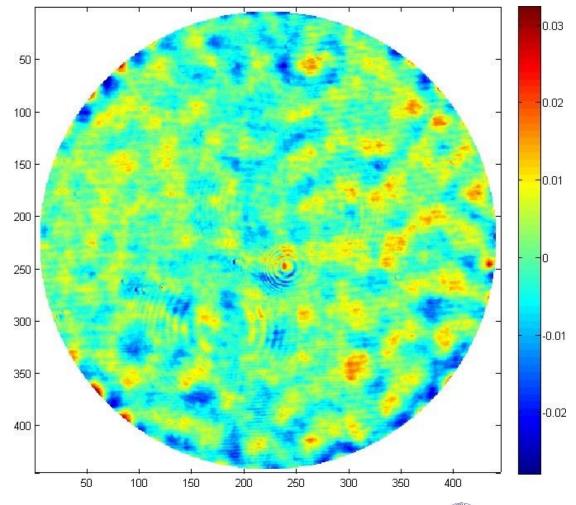








### Best Flat <30nm RMS as Modeled



























The first membrane is coated and in hand.















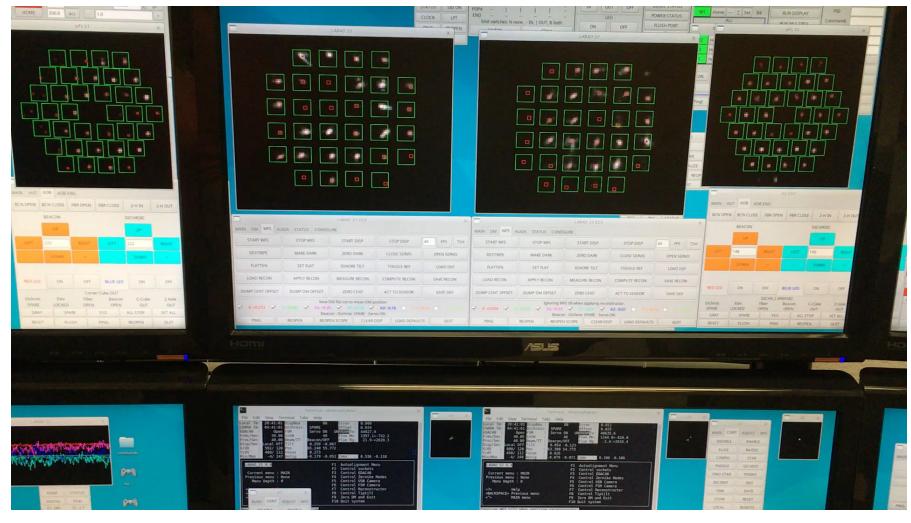






#### CHARA 2017: Year 13 Science Review – Adaptive Optics and Open Access



















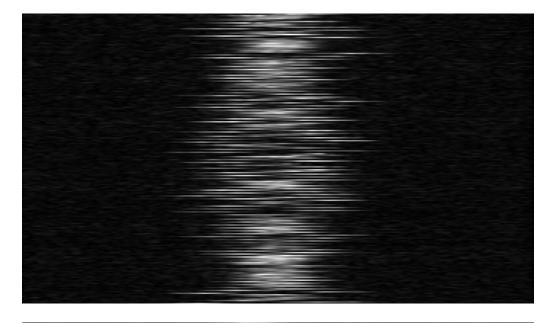




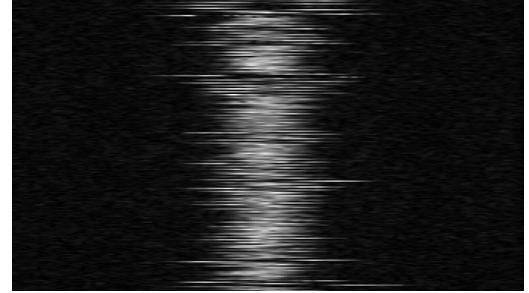








#### LABAO On



















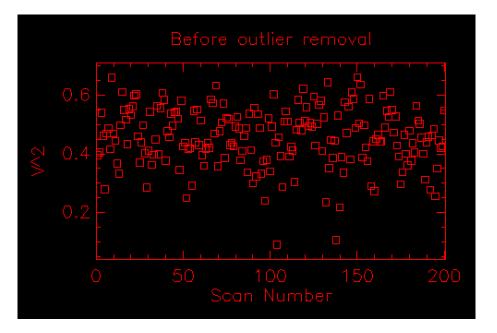


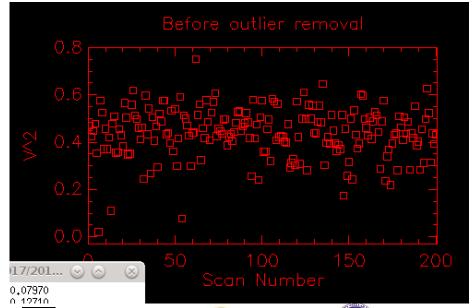




#### LABAO Off



















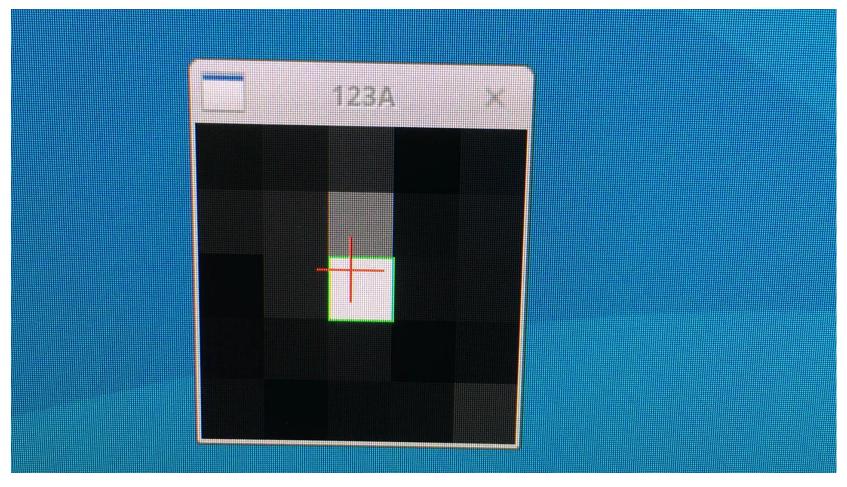


































More from Judit, Laszlo and Matt to come later today....























# The CHARA NSF/MSIP Program

- \$3.9M NSF funded program to expand community access to the CHARA Array.
- Includes several small infrastructure upgrades and a few large ones.
- Five new hires.
- Travel support for PI's award time.
- Outreach Workshops to be held at various locations around the U.S.















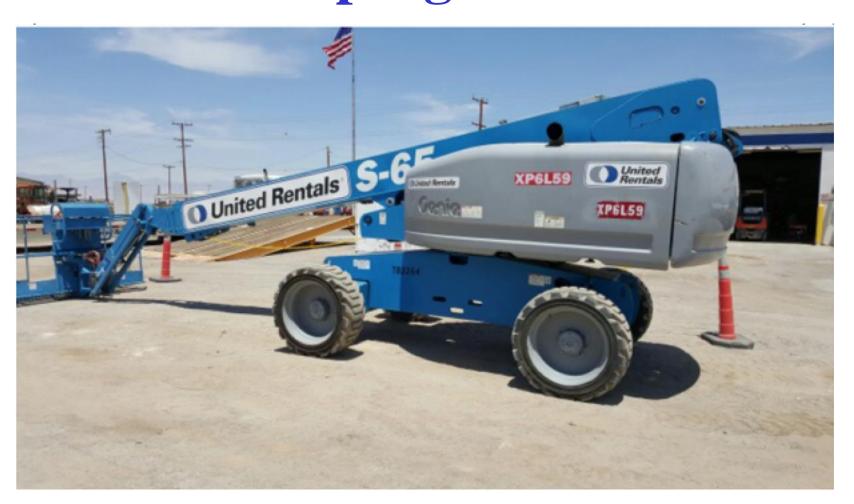








# The CHARA Boom Lift – In progress

























## Delay Line Control System Upgrade

- Based on upgrade now in nearly complete at NPOI.
- Linux and hardware to replace VME base computer control system.
- We hope to obtain spares of existing amplifiers, motor controllers and PZT controllers.
- Now in negotiations with engineering company responsible for NPOI upgrade.















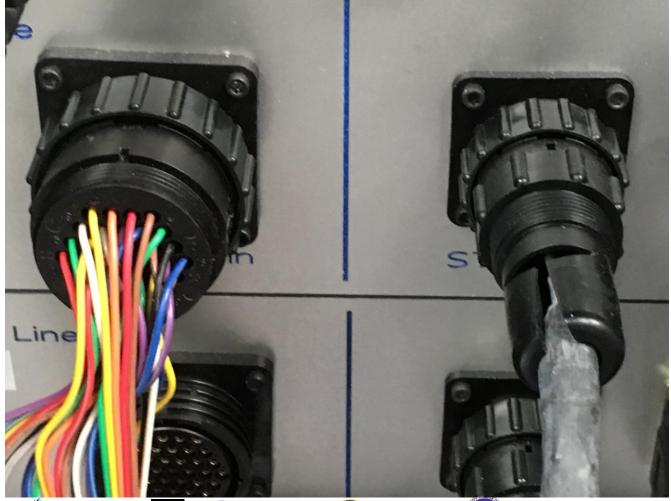








# Delay Line Control System Upgrade

























## Other Upgrades Include

- Minor Office re-shuffling and re-furnishing.
- Spare metrology laser an important single point failure of the Array.
- Spare vacuum system parts.
- Spare parts for telescopes drives and enclosures.
- Spare Newport/ESP controller.
- Various computer upgrades.























# Five new positions now advertised on AAS Job Register

- Visitor Support Scientist
- Data Scientist
- Assistant Site Manager
- Optical Laboratory Assistant
- Night time Telescope Operations Specialist.

Plus Outreach Workshops, the first to be held on Wednesday. The intention is to be inclusive of the full US Interferometry Community.























## Other new things coming up.

- The University is very keen for us to generate more funding based on observing time, and our collaborators are fully aware of this.
- New MoU with Kyoto Sango University (P.I. Makoto Kishimoto) based on AGN observations.
- New MoU with the University of Exeter (P.I. Stefan Kraus) based on MIRCx.
- In the process of establishing an official "cost per night" with the GSU Administration.























## More exciting times are ahead....





















