



# Some Introductory Remarks at CHARA's 11<sup>th</sup> Gathering

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*18 March 2015  
Atlanta, Georgia*





# The Last Time We Gathered...

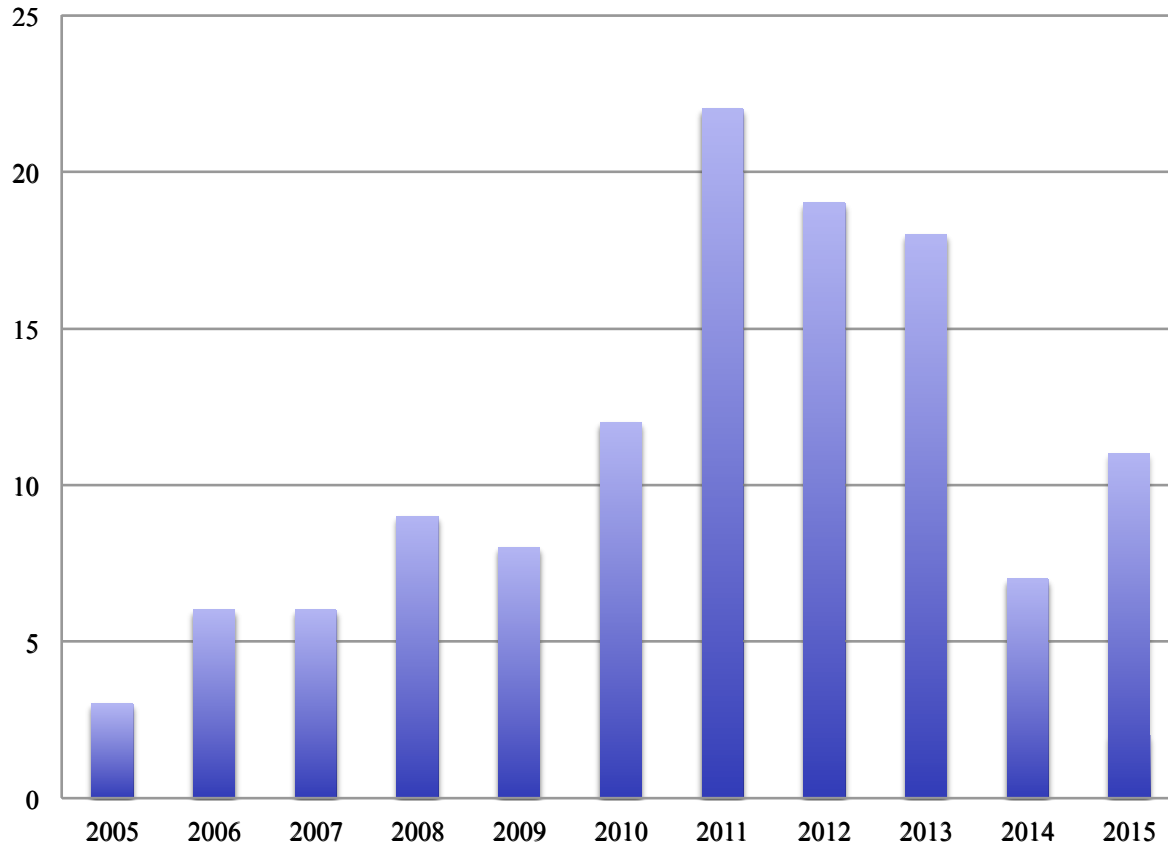
*At our 10<sup>th</sup> Annual Meeting, Ann Arbor, 24-25 Mar 2014*





# CHARA Refereed Papers

*112 to date (11 yr<sup>-1</sup>)*







## 2015 Papers I.

- ***Boyajian et al.*** - Stellar Diameters and Temperatures VI. High Angular Resolution Measurements of the Transiting Host Stars HD 189733 and HD 209458 and Implications for Models of Cool Dwarfs
- ***Tanner et al.*** - Stellar Parameters for HD 69830, a Nearby Star with Three Neptune Mass Planets and an Asteroid
- ***Creevey et al.*** - *Benchmark stars for Gaia .Fundamental Properties of the Population II Star HD 140283 from Interferometric, Spectroscopic, and Photometric Data*
- ***Mourard et al.*** - Spectral and Spatial Imaging of the Be+sdO Binary  $\phi$  Persei
- ***Perraut et al.*** - Fundamental Parameters of the Ap Star 78 Vir: Is it a Rapidly Oscillating Ap Star?
- ***Kloppenborg et al.*** - Interferometry of  $\epsilon$  Aurigae: Characterization of the Asymmetric Eclipsing Disk



## 2015 Papers II.

- *Gallenne et al.* - CANDID: Companion Analysis and Non-Detection in Interferometric Data: Application to binary Cepheids
- *Mérand et al.* - Cepheid distances from the Spectro-Photo-Interferometry of Pulsating Stars (SPIPS): Application to the prototypes  $\delta$  Cep and  $\eta$  Aql
- *Roettenbacher et al.* - Detecting the Companions and Ellipsoidal Variations of RS CVn Primaries: I.  $\sigma$  Geminorum
- *Parks et al.* - First Images of Cool Starspots on a Star Other than the Sun: Interferometric Imaging of  $\lambda$  Andromeda
- *Jones et al.* - The Ages of A-Stars I: Interferometric Observation and an Age Estimate for Stars in the Ursa Major Moving Group

*And this is only March!*



## 2015 Period 1 TAC Process

- No TAC was employed for Period 1
- We'll discuss this on Friday morning
- I'll send out the Period 2 call ~ 15 May



# Proposal to the NSF MSIP Program

- “Mid-Scale Innovations Program” was mandated by the Decadal Review.
- **Reminder:** We submitted a proposal to open CHARA time to the US community and to provide archival data.
- The \$3M, 5-yr program would allocate up to 50 nights per year.
- We were among 12 of 39 proposals submitted in the first round invited to submit a full proposal for the 12 Mar deadline.
- We weren’t successful in the second round - ratings were *Exc., Exc., Exc., Exc., Exc/VG, VG/G, G*
- Summary Statement: “The proposal seeks to open additional community access to a unique facility, which has been extremely successful. The panel found the CHARA proposal interesting, *but of limited impact*, falling below the threshold for funding in a highly competitive environment.”
- Although CHARA results have broad impact in stellar astrophysics, it is perceived as being *limited* overall.

**This is a problem for our field...**



# Proposal to the NSF MRI Program

- “Adaptive Optics Upgrade for the CHARA Array: Phase II” - Theo is PI
- Seeks ~\$1.6M, with \$0.49M cost sharing by GSU, primarily to buy DMs for each telescope
- Now under review ...

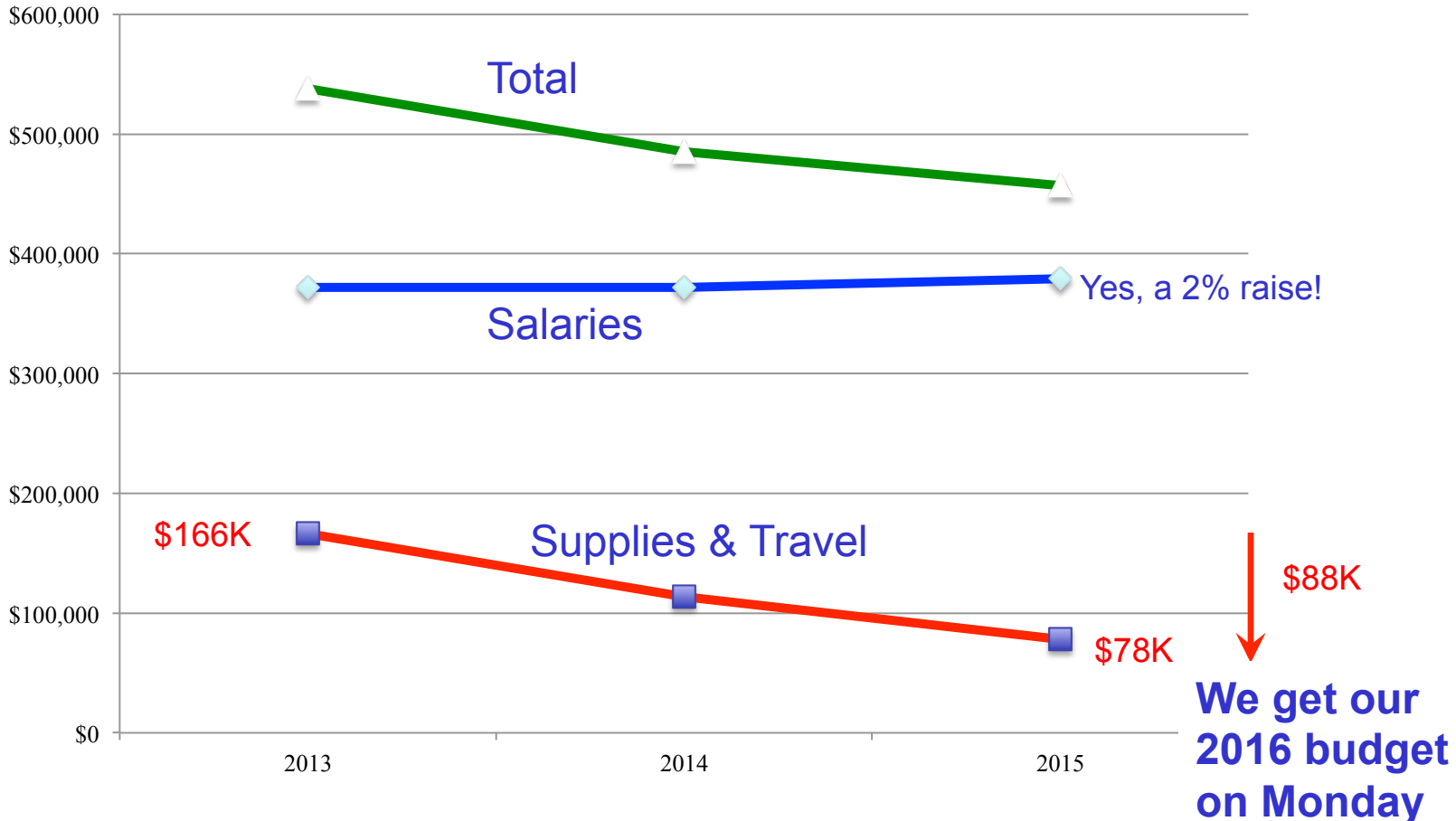
Here's Hoping!







# Recent Budget History



Observatoire de la COTE d'AZUR

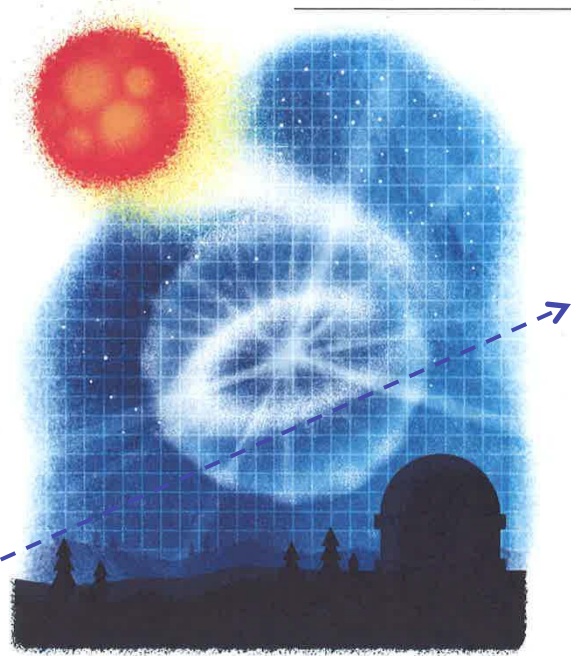




# GSU's Regard for Us

## CHARA

## Athletics



### FIRE IN THE SKY

LED BY GEORGIA STATE, ASTRONOMERS CAPTURE FIRST IMAGES OF THE EARLY FIREBALL STAGE OF A NOVA

Astronomers at Georgia State's Center for High Angular Resolution Astronomy (CHARA) at Mt. Wilson, Calif., near Los Angeles have produced the first images of a nova as it exploded and measured the expansion of the fireball into space.

Georgia State astronomer and research scientist

mer discovered a new star, named Nova Delphinus 2013. Within 15 hours of discovery, Schafer and the Mt. Wilson astronomers pointed the CHARA array of six, one-meter telescopes to image the fireball and measure it.

"We obtained size measurements of the nova on a total of 27 nights over

The observations produced the first images of a nova during that explosion and revealed how the structure of the ejected material evolves as the gas expands and cools. The results of the observations were published in the November 2014 issue of Nature.

Measuring the expan-

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good news and share with your network by visiting [magazine.gsu.edu/add-class-notes](http://magazine.gsu.edu/add-class-notes).



## ATHLETICS

### DEGREES OF SUCCESS

*Student-athlete graduation rates at all-time high*

Georgia State led the Sun Belt Conference schools in Graduation Success Rate for the second consecutive year when the NCAA announced its annual statistics in October. The most recent cohort — which accounts for four entering freshman classes from 2003-04 to 2006-07 — returned an 86 percent graduation rate for Georgia State, above the national average of 82.

The 86-percent mark was the highest in Panther history as four teams recorded perfect marks of 100 percent: volleyball, women's tennis, women's golf and men's tennis. Ten of the 12 countable Panther squads posted scores higher than their peers' national average. Men's basketball was five points above the national average.

# 59

Inches tall, or 4 ft. 11 in., the height of women's basketball star Alisha Andrews.

### STRONG WORK

*Panthers earn Sun Belt Conference and national accolades*

Several Georgia State student-athletes have been honored for their play on the fields and courts, within the Sun Belt Conference and nationally. Following their seasons, nine Panthers were selected to an All-Sun Belt team for their respective





## A Few Random Things for 2015

- **MWO is under new management. Hopefully, this will have no discernable implications.**
- **The mountain is poised for the worst water crisis in MWO history. Remote observing is encouraged.**
- **We will start the year without charging for lodging.**



## While the future is uncertain, I believe the best is still ahead

- The CHARA Array is still the highest resolution facility of its kind in the world & the most productive US interferometer ever.
- Our science crosses undreamt of aspects of stellar astrophysics.
- Significant gains are just around the corner from TT/AO improvements and detector developments.
- New classes of objects will soon be open to us.
- So, lean back, relax, and enjoy the next few days here in Atlanta.