

LIFE BEFORE OPTICAL SCIENCES

The pre-graduate story of
Jason Merritt

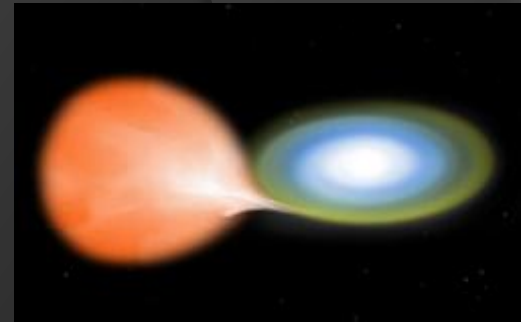




UNDERGRAD: VILLANOVA UNIVERSITY



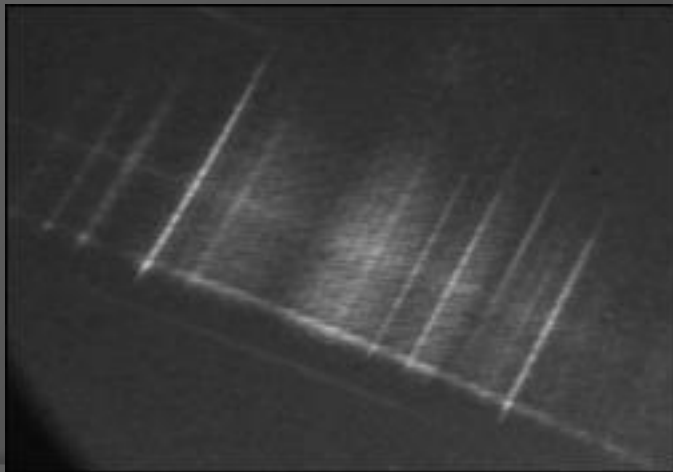
- ❖ Entered in Fall 2004
- ❖ B.S. in Astronomy & Astrophysics
- ❖ Research on various topics
 - Cataclysmic Variables
 - Proxima Centauri
 - Gas Spectroscopy Using Hollow-Core Optical Fibers
- ❖ Graduated in Spring 2008





UNDERGRAD: INTERNSHIPS, 2006

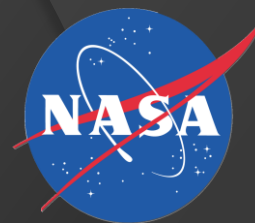
- ❖ NSF REU: SETI
- ❖ Worked with Peter Jenniskens on analysis of meteors
 - Spectral Modeling using an F77 program
 - Observational Technologies





UNDERGRAD: INTERNSHIPS, 2007

- ❖ NASA USRP: GLAST GBT
- ❖ Worked under Chip Meegan on analysis of instrument performance
 - Investigations into the time-tags of recorded γ -rays (times should have an error of less than $10 \mu\text{s}$)
 - Found a discrepancy between the time-tagging of 2 of the instruments by writing a C program to analyze the data sets
 - Results of discovery reduced error from $6+ \mu\text{s}$ to $< 2 \mu\text{s}$





UNDERGRAD: INTERNSHIPS, 2008

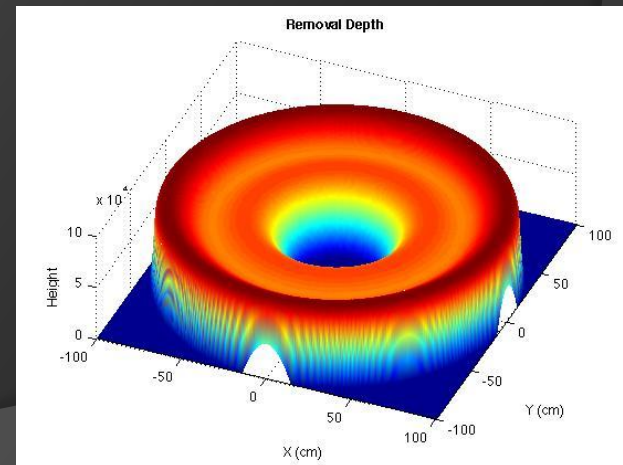
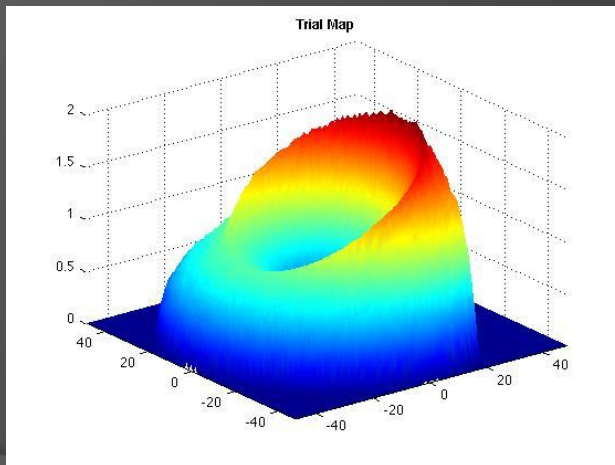
- ❖ L3-Tinsley: JWST
- ❖ Worked under Glen Cole on several different tasks:
 - Mirror fabrication schedule optimization through writing a C program
 - Investigation into properties of mirror defects as related to process
 - Development of protective cover for mirror inspection instrument





GRAD SCHOOL AND BEYOND...

- ❖ University of Arizona – Op Sci M.S.
 - Particular interest in the development and fabrication of large optics and space optics and also detectors (including active and adaptive optics)
 - Also, some interest in quantum photonics





GRAD SCHOOL AND BEYOND...

❖ Career Goals:

- Continue working in the industry of large optics
- Help to develop novel approaches to large optics and optical fabrication
- Have fun with life and stay curious!

