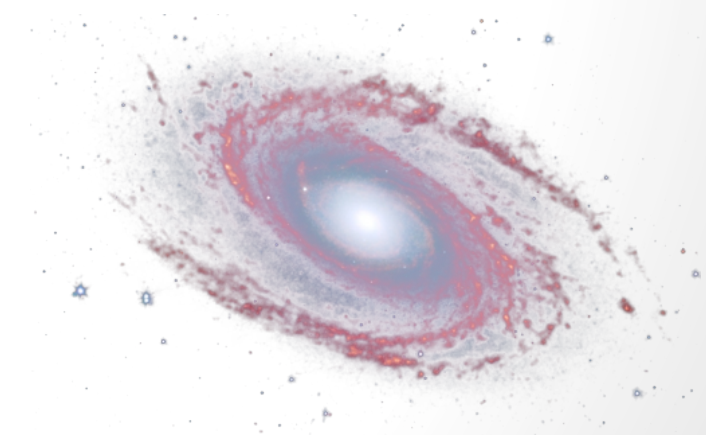# NON COM ASTRONOMY TALKS
AN
INTRODUCTION

Chuck Horst

San Diego State University

NCAT

1.0

OUTLINE

- Please call me Chuck
- What is **NCAT**?
- What Are Our Goals?
- Meeting Logistics
- What Will We Discuss?
- How Can You Contribute?
- Is There Help Outside Of **NCAT?**

- Todays Talks:
  - Welcome to grad school (Chuck Horst)
  - UNIX basics (Melanie Kae Olaes)

HELLO MY NAME IS CHUCK

- Please call me Chuck
- Adjunct Faculty
- M.S. Astronomy SDSU
- Astronomy is my hobby
- My observing experience
- My passion
- My research
- How to reach me
  - jhorst@mail.sdsu.edu
- Office hours
  - Fridays 8:00-11:00 PA123

WHAT ISN'T **NCAT**?

- Non compulsory
- No grades
- No reporting requirements to professors
- Not a place for answers to homework

WHAT IS **NCAT**?

- Periodic seminar, talks, & workshops
- Semi structured
- Can be topically driven
- First time given here at SDSU
- Currently under development

WHAT ARE OUR GOALS?

- Help you the student
  - Preparatory assistance
  - Some topics not covered in courses
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- President's Leadership Fund
- VALUED RESOURCE FOR STUDENTS!
  - What are your goals?

The PRESIDENT'S
LEADERSHIP fund

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MEETING LOGISTICS

- Tuesday's at 4:00 for 60-90 minutes?

- Meet weekly or bi-weekly?

- What room?

- Snacks?

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WHAT WILL WE DISCUSS?

- Introduction
  - Grad school tips (☑ *todays talk*)

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- Preparing for an observing run
  - Background
  - Observatory safety training
  - Preparing finder charts
  - Aladin operation
  - JSkyCalc operation
  - Seeing and weather conditions monitoring

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  - Seeing and weather conditions monitoring
- Observing techniques
  - Background
  - Object lists
  - IRAF
    - Headers, Imexam, display…
  - ds9
  - Data transfer
    - rsync, sftp, scp

WHAT WILL WE DISCUSS?

- Quick reduction procedure
  - Relative photometry
  - Simple scripting
  - Quick image processing script

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- Introduction to graphics
  - Grace
  - TopCat
  - Others?

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- Observer Certification preparation
- Preparing for a thesis in LaTeX
- Introduction to graphics
  - Grace
  - TopCat
  - Others?
- Programming topics
  - Introduction to IDL
  - XPA
  - UNIX
    - UNIX basics
    - Top 20 commands: sed, tar, grep, awk...
    - UNIX scripting

HOW CAN YOU CONTRIBUTE?

- Participate

- Give a talk

- Make recommendations

- Tell a friend

IS THERE HELP OUTSIDE OF NCAT?

- MLO certification
- Observatory manual & quick sheets
- Online documentation
- VirtualMachine server
- Remote observing runs

WELCOME TO GRAD SCHOOL

- How is it going so far?
- What to expect
- Course Tips
- Thesis Tips
- General Tips
- Technology Tips

WELCOME TO GRAD SCHOOL

- How is it going so far?

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WELCOME TO GRAD SCHOOL

- What to expect

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WELCOME TO GRAD SCHOOL

- Course Tips
  - Lectures
    - Record lecture
      - Best to sit up front
    - Capture black/white boards
    - Ask questions

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  - Studying
    - Re-listen to lectures
    - Transcribe notes

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    - Solve boundary conditions
    - Program or Excel?
    - TimeMachine

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    - Solve boundary conditions
    - Program or Excel?
    - TimeMachine
  - Tests
    - Prepare a study guide & memorize
    - Be the last student done

WELCOME TO GRAD SCHOOL

- Thesis Tips
  - Start research early
  - Start writing early
    - Just start to get some concepts down
  - Become proficient in LaTeX

WELCOME TO GRAD SCHOOL

- General Tips
  - Organization
    - Paper
      - David Allen, Getting Things Done
    - Digital
      - Filing structure
      - Naming structure
      - README files
      - Version control

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      - README files
      - Version control
  - Document your developmental nuggets
    - Capture quickly
      - Recorder, pocket note pad, phone APP
      - Don't wait till you open your laptop
    - File for retrieval
      - EverNote is one way

NCAT Intro

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WELCOME TO GRAD SCHOOL

- Technology Tips (free)
  - Evernote, Dropbox, Google Docs
    - What's the difference?
  - Express Scribe (free)
    - Dictation
  - Notetaker HD ($4.99)
    - Pdf markup for iPad
    - Handwritten notes
  - Backup (free)
    - TimeMachine
    - SuperDuper
- What is your favorite technology App?

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