



Workshop Organizers:

Gulab Dewangan (Coordinator)
 Gary J. Ferland
 R. Mishra
 R. Srianand,
 A. K. Kembhavi

Local Organizing Committee:

Sanjit Mitra
 Manjiri Mahabal
 Nirupama Bawdekar
 V. Chellathurai
 Santosh Khadilkar
 Rajesh Parmar
 Senith Samuel
 Varsha Surve
 Yogesh Thakare

Welcome! We are glad you are here!!




On the web

http://cloud9.pa.uky.edu/~gary/cloudy/CloudySummerSchool/2015_Pune/agenda2015Pune.html

- ◆ **Agenda** for the workshop
 - Includes copies of presentation
- ◆ **IUCAA** workshop page
- ◆ **Participant** interests & photos
- ◆ **ftp** site with our version of Cloudy, documentation, and examples

Stop me if I talk too fast!



Group projects

- ◆ Break up into small groups of like-minded participants
- ◆ Define a research problem you will do using Cloudy
- ◆ The project/group must have a memorable name (needed to get grants or telescope time)
- ◆ Give brief presentations of the projects at the end of each day
- ◆ Projects from [last workshop](#)

Proposed groups – pt 1

- ◆ Compact binaries, Sharada Jogadand, Md Shah Alam, Eeshankur Saikia, Aru Beri, Devraj Pawar, Bari Maqbool
- ◆ H II regions & ISM, Mayra Mabel Valerdi Negreros, Sathyanarayan K, Rahul Kumar Anand, Suhail Ahmad Siddiqui, Kumar Venkataramani
- ◆ IGM, P C Sachin, Katherine Rawlins, Siddhartha Gupta, Pritam Jyoti Borah, Ravi Joshi, Prakash S Gaikwad, Rajeshwari Dutta

Proposed groups – pt 2

- ◆ Stars, novae, supernovae, J S Dhanya, Joe Philip Ninan, Anindita Mondal, Abhishek Paswan, Gargi Shaw, Ramkrishna Das
- ◆ Star formation, chemical evolution, Reju Sam John, Tejpreet Kaur, José Espiritu, Sheelu Abraham, KANTI R. JOTANIA, Kartick Chandra Sarkar
- ◆ AGN1, inner, Pramod K. Pawar, Savithri H Ezhikode, Parveen Kumar, Navpreet Kaur, Sudip Chakraborty, Labani Mallick, Aditi Agarwal
- ◆ AGN2, outer, Ritesh Ghosh, Tanvir Hussain, Mahadev B. Pandge, Sapna Mishra, Main Pal, VINEET OJHA

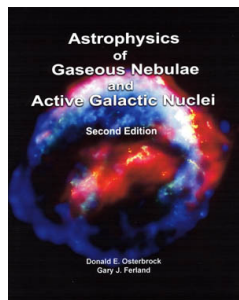
Some rules

- ◆ Rule 1: There are no rules
- ◆ Rule 2: Research is what you are doing when you don't know what you are doing
- ◆ You can switch groups if you like, or form a new group with other participants
- ◆ Rule 3: There has to be a summary of the group project by the end of the day

presentations

Osterbrock's Astrophysics of Gaseous Nebulae

- ◆ There are three versions, this is the 3rd
- ◆ Any version is OK
- ◆ On reserve in the IUCAA library



Our preview version of Cloudy

- ◆ This is a preview version of the next major release
- ◆ On the class [ftp site](#)
- ◆ Follow the instructions on this page, or [this video](#), to build the code on your laptop
 - We want to run examples during class
- ◆ PDFs of the Quick Start Guide, and the first two volumes of Hazy, its documentation, are there too.
 - Please don't print