

# CLOUDY WORKSHOP 2016

20-24 June 2016

Shandong University, Weihai

**Welcome! We are glad  
you are here!!**



## **Workshop Organizers:**

Tinggui Wang (USTC)

Gary J. Ferland (University of Kentucky)

Lulu Fan (SDU, Weihai)

# On the web

[http://cloud9.pa.uky.edu/~gary/cloudy/CloudySummerSchool/2016\\_Shandong/agenda.html](http://cloud9.pa.uky.edu/~gary/cloudy/CloudySummerSchool/2016_Shandong/agenda.html)

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

# Stop me if I talk too fast!



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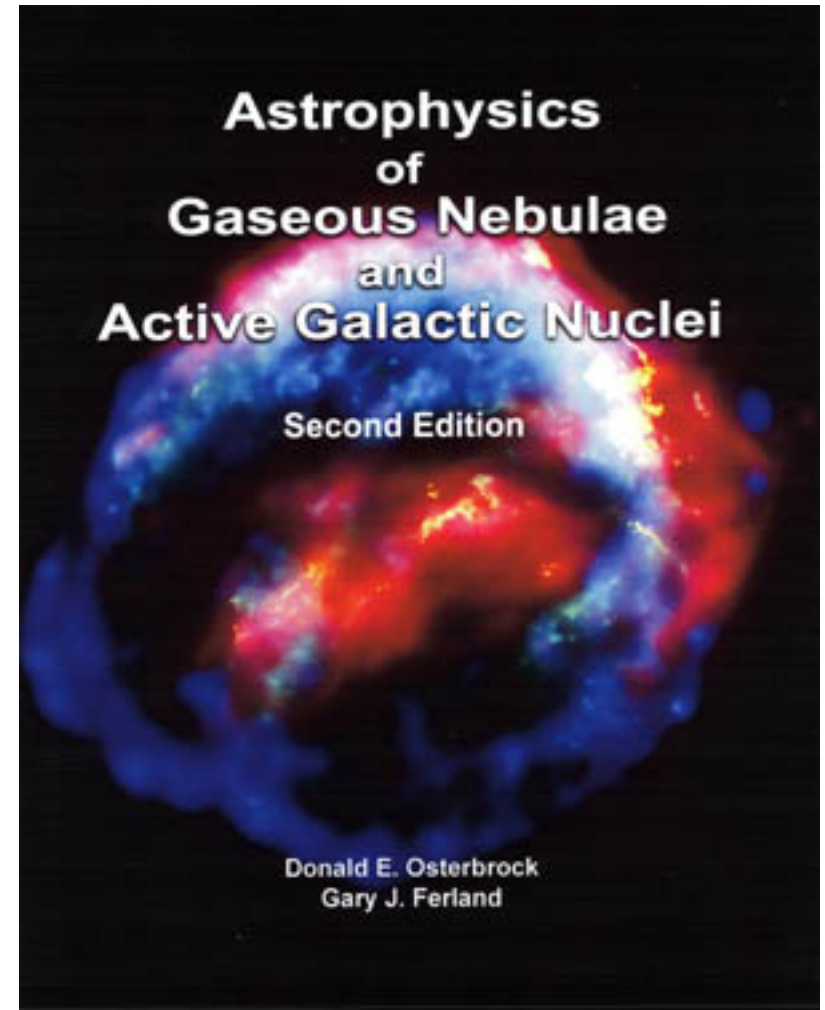
What?!? How are we supposed to understand THAT? They talk so fast!



# Osterbrock's Astrophysics of Gaseous Nebulae

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- ◆ There are three versions, this is the 3<sup>rd</sup>
- ◆ Any version is OK



# Our preview version of Cloudy

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- ◆ **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

# Group projects

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- ◆ **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**

# Some rules

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- ◆ **Rule 1: There are no rules**
- ◆ **Rule 2: Research is what you are doing when you don't know what you are doing**
- ◆ **Rule 3: You can switch groups if you like, or form a new group with other participants**
- ◆ **Rule 4: There has to be a summary of the group project by the end of the day**

# Proposed groups – AGN central

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- ◆ DENNIS ALP [dalp@kth.se](mailto:dalp@kth.se) KTH Royal Institute of Technology
- ◆ Madhurjya P Bora [mpbora@gauhati.ac.in](mailto:mpbora@gauhati.ac.in) Gauhati University, India
- ◆ Shaoming Hu [husm@sdu.edu.cn](mailto:husm@sdu.edu.cn) Shandong University at Weihai
- ◆ Qiguo Tian [tianqiguo@pric.org.cn](mailto:tianqiguo@pric.org.cn) Polar Research Institute of China
- ◆ Maochun Wu [maochun@ustc.edu.cn](mailto:maochun@ustc.edu.cn) University of Science and Technology of China



# Proposed groups – AGN Disk

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- ◆ Xiang Ji [844251823@qq.com](mailto:844251823@qq.com) National Astronomical Observatories
- ◆ Zhu Liu [liuzhu@nao.cas.cn](mailto:liuzhu@nao.cas.cn) National Astronomical Observatories
- ◆ Xiheng Shi [shixiheng@pric.org.cn](mailto:shixiheng@pric.org.cn) Polar Research Institute of China
- ◆ Zihao Song [songzihao@nao.cas.cn](mailto:songzihao@nao.cas.cn) National Astronomical Observatories
- ◆ Feilu Wang [wfl@bao.ac.cn](mailto:wfl@bao.ac.cn) National Astronomical Observatories
- ◆ Jianguo Wang [wangjg@yao.ac.cn](mailto:wangjg@yao.ac.cn) Yunnan Astronomical Observatory

# Proposed groups – AGN Winds

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- ◆ Lin He [helin@bao.ac.cn](mailto:helin@bao.ac.cn) National Astronomical Observatories
- ◆ Xiang Pan [sidpx@mail.ustc.edu.cn](mailto:sidpx@mail.ustc.edu.cn) University of Science and Technology of China
- ◆ Zhenfeng Sheng [shenzf@mail.ustc.edu.cn](mailto:shenzf@mail.ustc.edu.cn) University of Science and Technology of China
- ◆ Xinyue Shi [xyshi724@mail.ustc.edu.cn](mailto:xyshi724@mail.ustc.edu.cn) University of Science and Technology of China
- ◆ Fuguo Xie [fgxie@shao.ac.cn](mailto:fgxie@shao.ac.cn) Shanghai Astronomical Observatory

# Proposed groups – compact binaries

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- ◆ JITHESH VADAKKUMTHANI [jithesh@shao.ac.cn](mailto:jithesh@shao.ac.cn) Shanghai Astronomical Observatory
- ◆ Chenwei Yang [cwya@ustc.edu.cn](mailto:cwya@ustc.edu.cn) University of Science and Technology of China
- ◆ Doosoo Yoon [yoons@shao.ac.cn](mailto:yoons@shao.ac.cn) Shanghai Astronomical Observatory
- ◆ Xiaodi Yu [xdyu1990@icloud.com](mailto:xdyu1990@icloud.com) Xiamen university
- ◆ JieYing Liu [ljiy0807@ynao.ac.cn](mailto:ljiy0807@ynao.ac.cn) Yunnan Astronomical Observatory
- ◆ Yanli Qiu [qiuyanli824@163.com](mailto:qiuyanli824@163.com) National Astronomical Observatories

# Proposed groups – star formation

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- ◆ Ram Kesh Yadav [ram\\_kesh@narit.or.th](mailto:ram_kesh@narit.or.th) National Astronomical Research Institute of Thailand
- ◆ Ningyu Tang [astrotomny@gmail.com](mailto:astrotomny@gmail.com) National Astronomical Observatories
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- ◆ SHUINAI ZHANG [snzhang@pmo.ac.cn](mailto:snzhang@pmo.ac.cn) Purple Mountain Observatory
- ◆ Feng-Yao Zhu [zhufya@mail.ustc.edu.cn](mailto:zhufya@mail.ustc.edu.cn) University of Science and Technology of China

# Proposed groups – star formation & H II regions

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- ◆ Duo Xu [xuduo117@nao.cas.cn](mailto:xuduo117@nao.cas.cn) National Astronomical Observatories
- ◆ Ziwei Zhang [zzwwin@uga.edu](mailto:zzwwin@uga.edu) University of Georgia
- ◆ Wei Sun [sunwei@pmo.ac.cn](mailto:sunwei@pmo.ac.cn) Purple Mountain Observatory
- ◆ Ting Xiao [xiaoting@shao.ac.cn](mailto:xiaoting@shao.ac.cn) Shanghai Astronomical Observatory

# Proposed groups – starbursts

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- ◆ Tian-wen Cao [twcao@bao.ac.cn](mailto:twcao@bao.ac.cn) National Astronomical Observatories
- ◆ Zhicheng He [zcho@mail.ustc.edu.cn](mailto:zcho@mail.ustc.edu.cn) University of Science and Technology of China
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- ◆ Zeyuan Tang [tangzy@mail.ustc.edu.cn](mailto:tangzy@mail.ustc.edu.cn) University of Science and Technology of China
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