



**Interdisciplinary Workshop for Undergraduate Students
May 14-19, 2017**

SCHEDULE

Sunday, May 14

N.C. State University - [Centennial Campus - Valley Hall Wolf Ridge Apartments](#); [NCSU Centennial Campus Food Court](#)

- 10:00-4:30 Participant check-in at **Valley Hall Wolf Ridge Apartments**: vans will pick up participants from RDU
- 5:00-7:00 **Welcome Reception** at “[On the Oval Culinary Creations](#)” on NCSU Centennial Campus.
Coordinator: Thomas Gehrmann (NCSU) - Introductions, presentation expectations. **All SAMSI postdocs and graduate fellows**

Monday, May 15

N.C. State University, Centennial Campus – [Institute for Advanced Analytics](#), Suite 130, Brodie Auditorium

- 7:30-9:00 Individual Breakfast “**On the Oval Culinary Creations**”
- 9:15-9:30 Introduction and overview of SAMSI: **Sujit Ghosh**, Deputy Director, SAMSI
- 9:30-10:30 **Plenary Talk: Peter Mucha**, UNC-CH
“Communities in Networks”
- 10:30-10:45 Break
Beverage Break in Vance Reception Lounge. Beverage available from 9:00am on (this day only).
- 10:45-11:15 Project-I overview: **David Jones** (SAMSI)
“Lightcurve classification for periodically varying stars”
- 11:15-11:45 Project-II overview: **Peter Diao** (SAMSI)
“Distributionally Robust Stochastic Programming for Financial Applications”
- 11:45-12:15 Project-III overview: **David Stenning** (SAMSI)
“Finding Exoplanets Using Radial Velocity Data”
- 12:15-1:30 **GROUP PHOTO and LUNCH** in Vance Reception Lounge

- 1:30-2:00 Project-IV overview: **Sercan Yildiz** (SAMSI)
“Automatic Genre Classification of Music Pieces”
- 2:00-2:30 Project-V overview: **Hyungsuk Tak** (SAMSI)
“Time Delay Estimation for Gravitationally Lensed Light Curves”
- 2:30-3:00 Project-VI overview: **Ahmed Attita** (SAMSI)
“Data Assimilation for Numerical Weather Prediction”
- 3:00-3:30 Beverage Break in Vance Reception Lounge ends for the day.
- 3:30-4:30 Form 6 Project Groups (of size 6-7 members)
- 4:30-5:00 BREAK OUT GROUPS and meet with the project leaders/mentors
- 5:00-6:30 **Individual Dinner** at “On the Oval Culinary Creations,” or at each groups’ discretion
- 7:00-???
- Open Group Work time at each group's discretion

Tuesday, May 16th

N.C. State University, Centennial Campus – [Institute for Advanced Analytics](#), Suite 130, Brodie Auditorium

- 7:45-8:30 Individual Breakfast at participant choice.
- 8:45-9:00 Recap and announcements: **David Jones**
- 9:00-10:15 *Hands-on Introduction to R:*
David Stenning, David Jones, and Hyungsuk Tak (SAMSI) and Graduate Fellows
- 10:15-10:45 Break
- 10:45-12:00 *Hands-on Introduction to Python:*
Ahmed Attia (SAMSI)
 - Installation instructions, and Material will be available at:
 - o [Python Installation](#)
 - o [DATeS package and installation](#)
- 12:00-1:30 Group Lunch in Vance Reception Lounge.
- 1:30-2:30 Panel of Graduate Programs Directors:
Donald Martin (NCSU, Stat), **Pierre Gremaud** (NCSU, Math),
Surya Tokdar (Duke, Stat), **Shu Lu** (UNC, STOR)
- 2:30-2:45 Break

3:00-4:00 Opportunities in Analytics:
Michael Rappa, Institute of Advanced Analytics (NCSU)

4:00-5:30 Group Work at location of each group's discretion

5:30-6:45 Individual Dinner.

6:45-??? Open Group Work time at each group's discretion.

Wednesday, May 17th

N.C. State University, Centennial Campus – [Institute for Advanced Analytics](#), Suite 130, Brodie Auditorium

7:45-8:30 Individual Breakfast

8:45-9:00 Recap and Announcement: **Peter Diao** (SAMSI)

9:00-10:00 *How to give effective presentation: creating slides and posters*
Peter Diao (SAMSI)

10:00-10:15 Break

10:15-12:00 Groups prepare overview of projects - Turn in before lunch.
- Suite 130; **Swain**(5), **Tyrell** (5), and **Union** (5) rooms
- Suite 120; **Lincoln** (5), **Macon** (5), **Polk** (5), **Rowan** (5), **Nash** (12), and **Onslow** (12) rooms

12:00-1:30 GROUP LUNCH
- **Career Panel: SAMSI Grad Fellows and Postdocs.**

1:30-2:45 Get Feedback/Continue Group Work with Postdocs/Grads.

2:45-3:15 Break

3:15-5:00 Continue Group Work with Postdocs/Grads

5:00-6:00 Individual Dinner

6:00-??? Open Group Work time at each group's discretion and prepare materials for project updates

Thursday, May 18th

N.C. State University, Centennial Campus – [Institute for Advanced Analytics](#), Suite 130, Brodie Auditorium

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| 7:45-8:45 | Individual Breakfast |
| 8:45-10:00 | Updates from Student Group Leaders
Moderators: SAMSI Postdocs
[Each group leader presents an informal 10min overview of the six projects] |
| 10:00-10:15 | Break |
| 10:15-12:00 | Continue Group Work with Postdocs/Grads |
| 12:00-1:30 | Group Lunch in Vance Reception Lounge and SAMSI Open Question Time |
| 1:30-2:45 | Continue Group Work with Postdocs/Grads |
| 2:45-3:15 | Break |
| 3:15-5:00 | Groups practice presentations with Postdocs/Grads |
| 5:00-6:00 | Final Group Dinner and Dessert at “ On the Oval Culinary Creations ”
All Participants [including Project leaders and SAMSI Grad Fellows] |
| 6:00-??? | Open Group Work time at each group’s discretion. |

Friday, May 19th

N.C. State University, Centennial Campus – [Institute for Advanced Analytics](#), Suite 130, Brodie Auditorium

- 7:45-8:30 Individual Breakfast
- 8:45-9:00 Announcements: **Sujit Ghosh**, Deputy Director (SAMSI)
- 9:00-10:15 Group presentations and discussions
[Each of the 3 project group gets 25min each; bring slides loaded on a USB Thumb drive]
- 10:15-10:30 Break
- 10:30-11:45 Group presentations **[Each of the 3 project group gets 25min each]**
- 11:45-12:00 Vote of thanks and Project group photo with mentors
- 12:00 Adjourn and Box Lunch distribution - Shuttle van to RDU.