The Kavli Institute for Cosmological Physics (KICP) at the University of Chicago will host Non-Gaussianity Hub workshop on April 19-21, 2012. We plan to bring together theorists and data analysts in this 3-day workshop on non-Gaussianity to consolidate the recent progress and discuss future efforts. We expect attendance by about 30 worldwide leaders in the field of non-Gaussianity.

**Organizing Committee**

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
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<tbody>
<tr>
<td>Peter Adshead</td>
<td>Kavli Institute for Cosmological Physics</td>
</tr>
<tr>
<td>Scott Dodelson</td>
<td>KICP/Fermilab</td>
</tr>
<tr>
<td>Dragan Huterer</td>
<td>University of Michigan</td>
</tr>
</tbody>
</table>
### List of Participants

1. Peter Adshead | Kavli Institute for Cosmological Physics
2. Adam Becker | University of Michigan
3. Matthew Becker | Kavli Institute for Cosmological Physics
4. Laura Book | Caltech
5. David Burke | Stanford University
6. Thomas Crawford | Kavli Institute for Cosmological Physics
7. Martin Crocce | IEEC Barcelona
8. Carlos Cunha | Stanford University
9. Neal Dalal | University of Illinois
10. Scott Dodelson | KICP/Fermilab
11. Olivier Dore | JPL/Caltech
12. Cora Dvorkin | IAS
13. Tim Eifler | Ohio State University
14. Wenjuan Fang | University of Michigan
15. Joshua Frieman | Kavli Institute for Cosmological Physics
16. Juan Garcia-Bellido | Universidad Autonoma Madrid
17. Enrique Gaztanaga | IEEC Barcelona
18. Tommaso Giannantonio | LMU University Munich
19. Wayne Hu | Kavli Institute for Cosmological Physics
20. Dragan Huterer | University of Michigan
21. Donghui Jeong | Johns Hopkins University
22. Elisabeth Krause | Caltech
23. Andrey Kravtsov | Kavli Institute for Cosmological Physics
24. Marilena LoVerde | IAS
25. Michael Mortonson | Ohio State University
26. Sohyun Park | Fermi National Accelerator Laboratory
27. Youngsoo Park | Kavli Institute for Cosmological Physics
28. Will Percival | Portsmouth University
29. Ashley Ross | Portsmouth University
30. Roman Scoccimarro | NYU
31. Sarah Shandera | Penn State University
32. Michael Turner | Kavli Institute for Cosmological Physics
33. Risa Wechsler | Stanford University
34. Heidi Wu | University of Michigan
35. Mark Wyman | University of Chicago
## Workshop Program

April 19-21, 2012 @ LASR conference room

### April 19, 2012

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 9:30 AM - 9:40 AM | Dragan Huterer, University of Michigan  
Welcome: goals and topics for the meeting |
| 9:40 AM - 10:10 AM | Risa Wechsler, Matthew Becker and Martin Crocce  
A few words about the simulations |
| 10:10 AM - 12:30 PM | Present Results from Analysis of Sims |
| 12:30 PM - 2:00 PM | Lunch |

### Afternoon Session

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 2:00 PM - 2:30 PM | Marilena LoVerde, IAS  
Overview of NG models |
| 2:30 PM - 4:30 PM | Breakout Sessions: ~ 3 Groups Work on Analysis |
| 4:30 PM - 5:30 PM | Discussion of Systematics |
| 6:00 PM | Dinner  
Cedars Mediterranean Kitchen |

### April 20, 2012

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</table>
| 9:30 AM - 9:50 AM | Carlos Cunha, Stanford University  
Systematics: photo-z and spec-z |
| 9:50 AM - 10:10 AM | Ashley Ross, Portsmouth University  
Systematics: experience from BOSS |
| 10:10 AM - 12:00 PM | Breakout Sessions: Work on Incorporating Systematics |
| 12:00 PM - 1:00 PM | Will Percival, Portsmouth University  
First results from galaxy clustering in the BOSS survey |
| 1:00 PM - 2:00 PM | Lunch |

### Afternoon Session

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>2:00 PM - 3:00 PM</td>
<td>Breakout Sessions: Work on Incorporating Systematics</td>
</tr>
</tbody>
</table>
| 3:00 PM - 3:30 PM | Peter Adshead, Kavli Institute for Cosmological Physics  
Aspects of NG effect on the LSS |
| 3:30 PM - 5:00 PM | Breakout Sessions: ~ 3 Groups Work on Analysis |
| 5:00 PM - 5:30 PM | Discussion |
April 21, 2012

**MORNING SESSION**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
</tr>
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<tr>
<td>9:30 AM - 10:00 AM</td>
<td><strong>Tommaso Giannantonio</strong>, LMU University Munich</td>
<td>Constraining NG with current LSS and ISW data and outlook for the DES</td>
</tr>
<tr>
<td>10:00 AM - 10:30 AM</td>
<td><strong>Roman Scoccimarro</strong>, NYU</td>
<td>Bias, Gaussian and non-Gaussian, local and non-local</td>
</tr>
<tr>
<td>10:30 AM</td>
<td></td>
<td>DISCUSSION OF FUTURE WORK: THEORY + ANALYSIS, LSS+CMB</td>
</tr>
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</table>

**Simulations to Discuss**

Come to the workshop with your constraint on f_NL not worrying about systematics or uncertainties in the other cosmological parameters and work on the analysis of simulations:

* How would the systematics enter?
* What about inflationary input?
* Model -> observables?

**Simulation 1**

Acknowledgments: Thanks to Michael Busha, Matt Becker, Brandon Erickson, Andrey Kravtsov, Gus Evrard, Risa Wechsler and others who made this possible.

**DATA:** [http://logrus.uchicago.edu/~beckermr/nongauss/](http://logrus.uchicago.edu/~beckermr/nongauss/)

**Simulation 2**

Acknowledgments: Thanks to Martin Crocce, Francisco Castander, Pablo Fosalba, Enrique Gaztanaga, and the MICE team.

**DATA:** [http://segre.ieec.uab.es/crocce/DES/PNGworkshop/](http://segre.ieec.uab.es/crocce/DES/PNGworkshop/)
### Workshop Talks

1. **Peter Adshead**, Kavli Institute for Cosmological Physics  
   *Aspects of NG effect on the LSS*  
   April 20, 2012 (3:00 PM - 3:30 PM)

2. **Carlos Cunha**, Stanford University  
   *Systematics: photo-z and spec-z*  
   April 20, 2012 (9:30 AM - 9:50 AM)

3. **Tommaso Giannantonio**, LMU University Munich  
   *Constraining NG with current LSS and ISW data and outlook for the DES*  
   April 21, 2012 (9:30 AM - 10:00 AM)

4. **Dragan Huterer**, University of Michigan  
   *Welcome: goals and topics for the meeting*  
   April 19, 2012 (9:30 AM - 9:40 AM)

5. **Marilena LoVerde**, IAS  
   *Overview of NG models*  
   April 19, 2012 (2:00 PM - 2:30 PM)

6. **Will Percival**, Portsmouth University  
   *First results from galaxy clustering in the BOSS survey*  
   April 20, 2012 (12:00 PM - 1:00 PM)

7. **Ashley Ross**, Portsmouth University  
   *Systematics: experience from BOSS*  
   April 20, 2012 (9:50 AM - 10:10 AM)

8. **Roman Scoccimarro**, NYU  
   *Bias, Gaussian and non-Gaussian, local and non-local*  
   April 21, 2012 (10:00 AM - 10:30 AM)