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# 国台学术报告 NAOC COLLOQUIUM

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**Time: Wednesday 2:30 PM, Jun. 24**    **Location: A601 NAOC**

## Revealing the Mysteries behind Galaxy Formation Feedback Using Bayesian Computation and Back-of-Envelope Calculation

**Dr. Yu Lu**

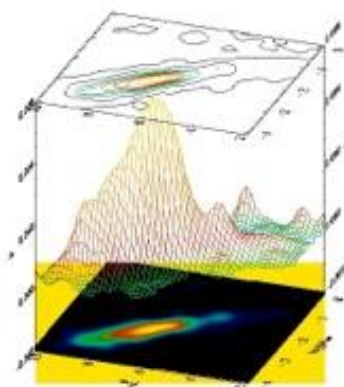
**Carnegie Observatories**



Dr. Yu Lu received his PhD in astrophysics from University of Massachusetts, Amherst in 2010. After that he was a KIPAC fellow at the Kavli Institute for Particle Astrophysics and Cosmology at Stanford University, and joined the Carnegie Observatories as a postdoctoral research associate in 2014. Dr. Lu's research interests include galaxy formation, structure formation, and the application of statistics in astronomy. He constructs analytical and semi-analytical models to understand galaxy formation and is actively involved in various observational programs. In particular, he develops a Bayesian inference framework for galaxy formation modeling to join galaxy formation theory with observations.

### Abstract

Feedback is thought to be important in shaping galaxies, but how it works is still poorly understood. In this talk, I will present a series of studies using Bayesian computation and analytical calculations to gain insight into feedback processes in galaxy formation. In particular, I will highlight how a family of model that captures the preventive nature of feedback reproduces remarkably well a number of observational scaling relations of low-mass galaxies and discuss the implications.



*All are welcome! Tea, coffee, biscuits will be served at 2:15 PM.*