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About TDLI

Professor Tsung-Dao Lee is considered as one of the World's greatest and broadest theoretical physicists. Through his distinguished scientific career and involvement in both China and the United States, he has received a long list of recognitions including the 1957 Nobel Prize in Physics shared with Professor Chen-Ning Yang for the prediction of parity violation. Since the early seventies of last century, Professor Lee has made great efforts to establish and strengthen academic exchanges and collaborations between Chinese and American physics communities. He is attributed for several historic developments in physical researches and the cultivation of talents in younger generations for modern China.

The T. D. Lee Institute is a national initiative by the Chinese Central Government in recognition of Professor Lee's great contribution in physics. In December of 2014, with the aim to boost researches in basic sciences and interdisciplinary fields, Professor Lee submitted a proposal, to the Chinese Central Government, for establishing a top-notch physics research institute that is similar to the Niels Bohr Institute at Copenhagen and Institute of Advanced Studies at Princeton. The central government has strongly committed to this endeavor.

In November, 2016, the Ministry of Science and Technology, the Ministry of Education and the Municipal Government of Shanghai jointly decided to establish a national research institute in Shanghai under the name of Professor Tsung-Dao Lee. The initiative is then immediately joined with investment by National Science Foundation of China. Shanghai Jiao Tong University is retained and approved by the government to operate the new Institute as its contractor and trustee.

The goal of Tsung-Dao Lee Institute is to be a world famous source of original innovation, a point of convergence for the world's top scientists, and a launch platform for the careers of young scholars.

About Workshop on Halo and Galaxy Assembly Bias

The main topics of the workshop will include

- theoretical study of assembly bias,
- observational probe of assembly bias,
- galaxy formation from assembly bias,
- effect of assembly bias on cosmology constraints,
- incorporation of assembly bias into the clustering model.

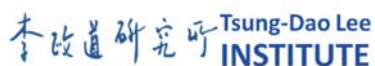
Workshop Website: <http://tdli.sjtu.edu.cn/Web/yjxy/5130081-5130000000547.htm>

SOC

Jiaxin Han (SJTU, Co-Chair)
Alexie Leauthaud (UCSC)
Houjun Mo (UMASS/THU)
Ravi Sheth (UPenn)
Simon White (MPA)
Idit Zehavi (CWRU)
Zheng Zheng (Utah/TDLI, Co-Chair)
Ying Zu (SJTU, Co-Chair)

LOC

Junde Chen (SJTU)
Sheng Li (TDLI)
Zhaozhou Li (SJTU)
Jinghua Shi (TDLI)
Haojie Xu (SJTU)
Youbin Zhao (SJTU)



SHANGHAI JIAO TONG UNIVERSITY
Department of Astronomy

Halo and Galaxy Assembly Bias - from Theory to Observation

Sunday 09 June 2019 - Friday 14 June 2019

**TDLI / SJTU-DoA
Programme**

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Sunday 09 June 2019

Workshop Reception - (18:00-21:00)

Monday 10 June 2019

Description and Origin of Halo Assembly Bias - Dept of Astronomy Meeting Room 507 (09:00-12:00)

- Conveners: Mo, Houjun

time	title	presenter
09:00	Opening Remarks	ZHENG, Zheng
09:10	Welcome Remarks	JING, Yipeng
09:20	Reconstructing the multivariate halo bias function in simulations	HAN, Jiaxin
09:45	The Multivariate Dependence of Halo Bias and a Simplified Description of Central Galaxy Assembly Bias	ZHENG, Zheng
10:10	Tea Break	
10:40	Neighbor Bias in Halo Clustering and Cosmological Forecasting with Cluster-Cross Correlations	SALCEDO, Andres
11:05	Halo and Galaxy Assembly Bias: from N-body numerical simulations to galaxy data	MONTERO-DORTA, Antonio
11:30	Discussion	

Lunch Break - (12:00-14:00)

Description and Origin of Halo Assembly Bias: afternoon - Dept of Astronomy Meeting Room 507 (14:00-16:40)

- Conveners: Shi, Jingjing

time	title	presenter
14:00	The tidal field and assembly bias	SHETH, Ravi
14:25	Assembly Bias with the Tessellation Level Tree	BUSCH, Philipp
14:50	Tea Break	
15:20	On the origins of assembly bias (oral talk)	MO, Houjun
15:45	What Causes Low-Mass Assembly Bias?	MANSFIELD, Philip
16:10	Discussion	

Tuesday 11 June 2019

Assembly Bias in Galaxy-Halo Connection - Dept of Astronomy Meeting Room 507

(09:00-12:05)

- Conveners: Berlind, Andreas

time	title	presenter
09:00	Assembly Bias and the Galaxy Content of Dark Matter Halos	ZEHAVI, Idit
09:25	The impact of assembly bias on the halo occupation in hydrodynamical simulations	ARTALE, Maria Celeste
09:50	The Evolution of Assembly Bias	CONTRERAS, Sergio
10:15	Tea Break	
10:45	Letting the Data Speak for Themselves: What Observations Tell Us About Galaxy Formation	KATZ, Neal
11:10	Accretion histories tracers - Halo profiles and galaxy properties	ADHIKARI, Susmita
11:35	Discussion	

Lunck Break - (12:05-14:00)

Assembly Bias in Galaxy-Halo Connection: afternoon - Dept of Astronomy Meeting Room 507 (14:00-16:40)

- Conveners: Zehavi, Idit

time	title	presenter
14:00	Galaxy assembly bias in different models of galaxy formation	WANG, Lan
14:25	Influence of assembly bias on galaxy star formation history	CHAVES-MONTERO, Jonas
14:50	Tea Break	
15:20	The formation history of sub-halos and its implications for satellite galaxy evolution	SHI, jingjing
15:45	Conditional Color-Magnitude Distribution of Present-day Galaxies	XU, Haojie
16:10	Discussion	

Wednesday 12 June 2019

Free Time - (09:00-17:00)

Thursday 13 June 2019

Observational Tests of Assembly Bias - Methods and Results - Dept of Astronomy Meeting Room 507 (09:00-12:05)

- Conveners: Wang, Lan

time	title	presenter
09:00	Can we detect secondary bias from measurements of galactic conformity or galaxy clustering?	BERLIND, Andreas
09:25	How to Optimally Constrain Galaxy Assembly Bias Using Galaxy Statistics	WANG, Kuan
09:50	Tea Break	
10:20	Probing the Galaxy-Halo Connection with Total Satellite Luminosity	TINKER, Jeremy
10:45	Observationally Tracing Hierarchical Assembly: The Stellar Mass - Halo Mass - Magnitude Gap Relation	GOLDEN-MARX, Jesse
11:10	Accurate Modeling of the Projected Galaxy Clustering in Photometric Surveys: I. Tests with Mock Catalogs	WANG, Zhaoyu
11:35	Discussion	

Lunch Break - (12:05-14:00)

Observational Tests of Assembly Bias - Methods and Results: afternoon - Dept of Astronomy Meeting Room 507 (14:00-17:05)

- Conveners: Tinker, Jeremy

time	title	presenter
14:00	On detecting assembly bias at galaxy cluster scales	LIN, Yen-Ting
14:25	Trying to detect assembly bias using redMaPPer BCG properties	SUNAYAMA, Tomomi
14:50	Where is the assembly bias - I still haven't found what I'm looking for	ZU, Ying
15:15	Tea break	
15:45	The galaxy-halo connection on the cosmic web	TOJEIRO, Rita
16:10	Constrain Massive Cluster Formation with SDSS	LI, Zhaozhou
16:35	Discussion	

Banquet - (17:30-20:30)

Friday 14 June 2019

Implications and Applications of Assembly Bias - Dept of Astronomy Meeting Room 507 (09:00-12:30)

- Conveners: Sheth, Ravi

time	title	presenter
09:00	Galaxy assembly bias and redshift space distortions	PADILLA, Nelson
09:25	The Effects of Galaxy Assembly Bias on the Inference of Growth Rate from Redshift-Space Distortions	MCCARTHY, Kevin
09:50	On the Biasing Effects of Galaxy Secondary Bias on Cosmological Inference	MCLAUGHLIN, Sean
10:15	Tea Break	
10:45	Halo Assembly Bias Effect Revealed by the Galaxy Neutral Hydrogen Content	GUO, Hong
11:10	Parametric vs non-parametric effective bias descriptions	KITAURA, Francisco
11:35	Model the Nonlinear Universe with Machine Learning	LI, Yin
12:00	Discussion	

Lunch Break - (12:30-14:00)

General Information



Registration

Registration Time	Location
June 10, 08:30 – 12:00	Conference Venue, Department of Astronomy



Meals

Date	Breakfast	Lunch	Dinner
June 9	-----	-----	Reception at Hotel (18:00-21:00)
June 10	Hotel	2 nd floor, No. 4 Dining Hall	-----
June 11	Hotel	2 nd floor, No. 4 Dining Hall	
June 12 Free Time	Hotel	-----	-----
June 13	Hotel	2 nd floor, No. 4 Dining Hall	Banquet at Liuyuan (17:30-20:30)
June 14	Hotel	2 nd floor, No. 4 Dining Hall	-----



Accommodation

Hotel Name: Mehood Lestie Hotel

Address: No.499 Shiping Road, Minhang District, Shanghai

Tel: [\(+86\) 021-6435 6999](tel:+862164356999)

酒店名称： 美豪丽致酒店

酒店地址： 上海市闵行区石屏路 499 号

电话： [\(+86\) 021-6435 6999](tel:+862164356999)





Conference Venue

Department of Astronomy Conference Room
5th floor, No.5 Building of the New Science Buildings
Shanghai Jiao Tong University
No.800 Dongchuan Road, Minhang District

上海交通大学天文系会议室
闵行区东川路 800 号，新理综楼 5 号楼 5 楼



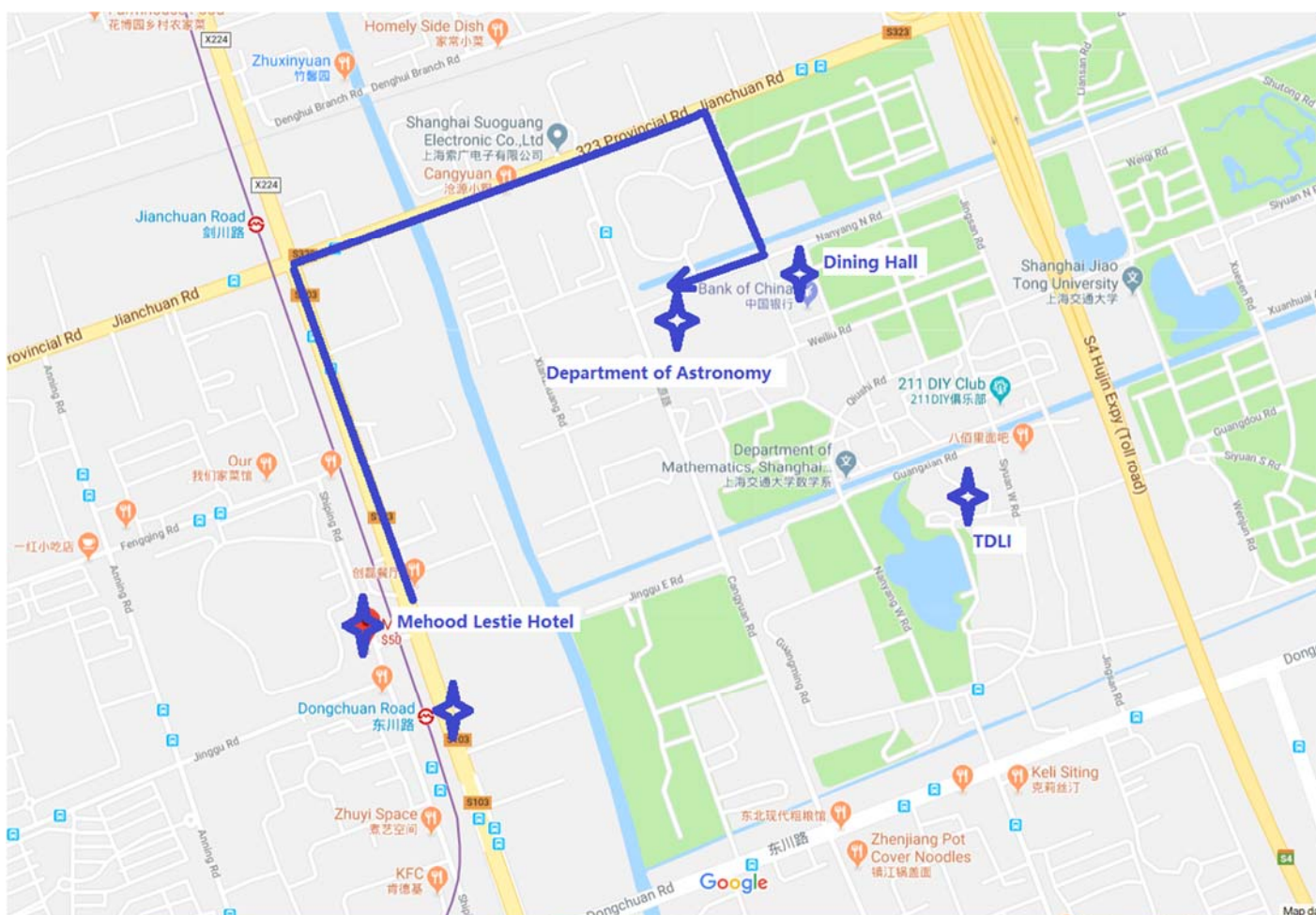
Shuttle Bus

In the mornings of June 10 to June 14 (except June 12), **campus shuttle bus will wait in front of the hotel at 8:30AM.**

Date	Route	Departure Time
June 10-14 (except June 12)	Mehood Lestie Hotel → Conference Venue	8:30 AM

By Walking

From Hotel to the Venue is around 1.9km, taking about 30 mins by walking.





Wifi Information

Option 1: DOA-postdoc

Password: astrophysics

Option 2: DOA-East

Password: astrophysics

Option 3: A506

No password

Local Transportation

Taxi/Subway



From Pudong International Airport to the Hotel

- By taxi: taking around **70 minutes**, costing around **200 RMB**;
- By subway: taking the Subway Line 2 (direction: East Xujing) to the People's Square Station, transferring the Line 1 (direction: Xinzhuang) to the Xinzhuang Station, transferring the Line 5 (direction: Minhang Development Zone) to the Dongchuan Road Station, exit from No.4, finally walking around 120 meters to find the hotel. The whole journey will take you around **2 hours 20 minutes** and cost around **10 RMB**.

From Hongqiao International Airport to the Hotel

- By taxi: taking around **50 minutes**, costing around **100 RMB**;
- By subway: taking the Subway Line 10 (direction: Xinjiangwancheng) to the Hongqiao Road Station, transferring the Line 4 (direction: Yishan Road) to the Shanghai Indoor Stadium Station, transferring the the Line 1 (direction: Xinzhuang) to the Xinzhuang Station, transferring the Line 5 (direction: Minhang Development Zone) to the Dongchuan Road Station, exit from No. 4, finally walking around 120 meters to find the hotel. The whole journey will take you around **1 hours 40 minutes** and cost around **6 RMB**.

From Hongqiao Railway Station to the Hotel

- By taxi: taking around **50 minutes**, costing around **100 RMB**;

-- By subway: taking the Subway Line 10 (direction: Xinjiangwancheng) to the Hongqiao Road Station, transferring the Line 4 (direction: Yishan Road) to the Shanghai Indoor Stadium Station, transferring the the Line 1 (direction: Xinzhuang) to the Xinzhuang Station, transferring the Line 5 (direction: Minhang Development Zone) to the Dongchuan Road Station, exit from No. 4, finally walking around 120 meters to find the hotel. The whole journey will take you around **1 hours 40 minutes** and cost around **6 RMB**.

From Shanghai Railway Station to the Hotel

--By taxi: taking around **70 minutes**, costing around **120 RMB**

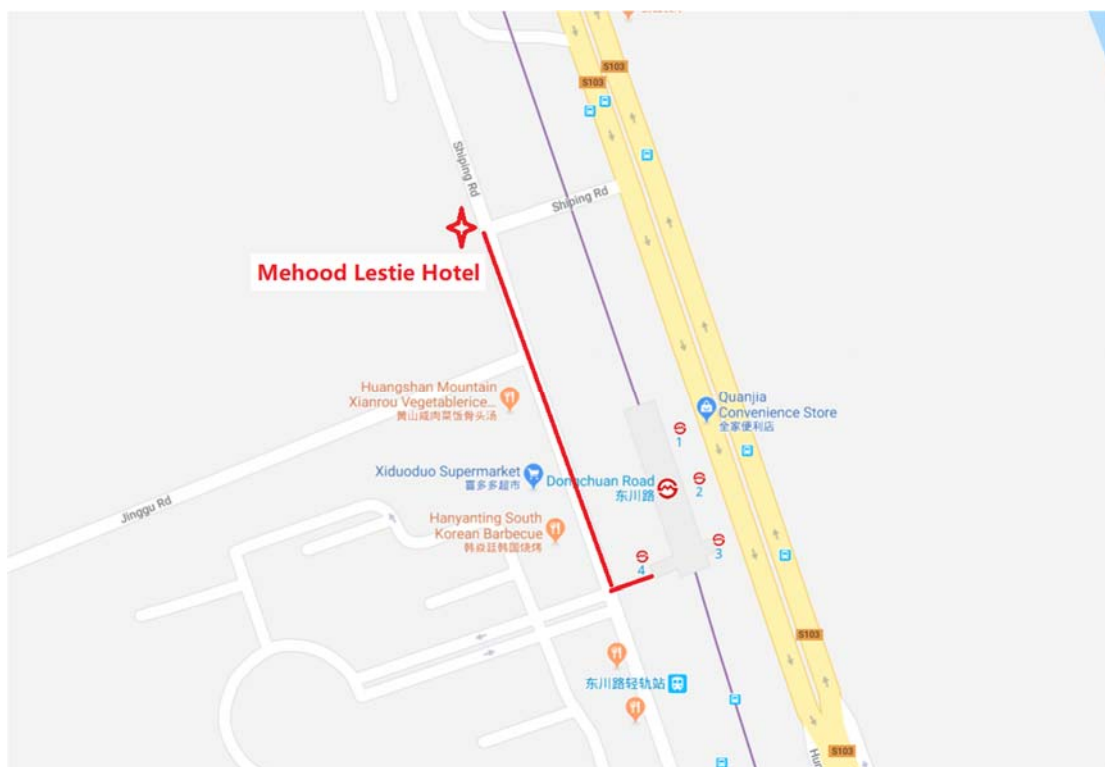
--By subway: taking the Subway Line 1 (direction: Xinzhuang) to the Xinzhuang Station, transferring the Line 5 (direction: Minhang Development Zone) to the Dongchuan Road Station, exit from No. 4, finally walking around 120 meters to find the hotel. The whole journey will take you around **1 hours 30 minutes** and cost around **6 RMB**.

From Shanghai South Railway Station to the Hotel

--By taxi: taking around **40 minutes**, costing around **70 RMB**;

--By subway: taking the Subway Line 1 (direction: Xinzhuang) to the Xinzhuang Station, transferring the Line 5 (direction: Minhang Development Zone) to the Dongchuan Road Station, exit from No. 4, finally walking around 120 meters to find the hotel. The whole journey will take you around **1 hours** and cost around **5 RMB**.

From the Dongchuan Road Station to the hotel is around 120 meters:



It may be helpful to print out the following instruction, and show it to the taxi driver.

请送我到美豪丽致酒店

地址：上海市闵行区石屏路499号

联系人：石老师（13611947014）

Please take me to the Mehood Lestie hotel, Minhang Campus, Shanghai
Jiao Tong University.

In case of any problem, please contact Ms. Shi (13611947014).

About Shanghai

Shanghai, a vigorous and energetic international metro-polis, welcomes people from all over the world to enjoy its special atmosphere. This modern metropolis with its rich heritage of ancient Chinese culture has much to see and do. There're many attractions of Shanghai included Oriental Pearl TV Tower, the Bund, Nanjing Road, Jing'an temple, Yuyuan Garden, Disneyland Park and so on. Due to its rapid growth over the last two decades it has again become a global city, exerting influence over finance, commerce, fashion, technology and culture.

For more sightseeing information, please refer to the following

<http://www.travelchinaguide.com/cityguides/shanghai.htm>

<http://www.chinatravel.com/china-guide/>



Yuyuan Garden is a famous classical garden located in Anren Jie. It was finished in 1577 by a government officer of the Ming Dynasty (1368-1644) named Pan Yunduan. Yu in Chinese means pleasing and satisfying, and this garden was specially built for Pan's parents as a place for them to enjoy a tranquil and happy time in their old age.

The Bund, is a famous waterfront and regarded as the symbol of Shanghai for hundreds of years. It is on the west bank of Huangpu River from the Waibaidu Bridge to Nanpu Bridge and winds 0.93 mile in length. The most famous and attractive sight which is at the west side of the Bund are the various buildings of different architectural styles including Gothic, Baroque, Romanesque.

