

2019

ATMOSPHERIC SCIENCES OF PEKING UNIVERSITY

90TH ANNIVERSARY

PROGRAM



23 May – 2 June 2019

Department of Atmospheric and Oceanic Sciences

School of Physics, Peking University

Event Program

May 23	6 th Graduate Student Forum on Global Change (Page 2) W202 School of Physics, PKU
May 24	International Workshop on Exoplanet (Page 6) M212 School of Physics, PKU
May 25	90 th Anniversary Ceremony (Page 9) Sunshine Hall, Overseas Exchange Center, PKU
May 25-26	90 th Anniversary Symposium (Page 11) Plenary: W301 School of Physics, PKU Session 1, 3: W202 School of Physics, PKU Session 2, 4: M212 School of Physics, PKU
May 27-30	Multiscale Convection Summer School (Page 16) W301 School of Physics, PKU
May 31-June 2	3 rd International Workshop of the Severe Weather International Consortium (SWIC) (Page 21) W301 School of Physics, PKU

Program Notes

This program contains the list of distinguished guests for the 90th Anniversary Ceremony on 25 May 2019, Map of PKU campus and School of Physics, and Traffic instructions following the schedules on Page 27-36.

Contact: Meijing Liu (13466756725), Shuang Yang (18600562925)

6th Graduate Student Forum on Global Change

Organized by Zhongjing Jiang from Peking University

23 May, 2019

W202 School of Physics, Peking University

Thursday, 23 May 2019

Venue: W202 School of Physics, Peking University

Session 1 Oral Presentation

Chair: Jingjing Ren, Peking University

- 08:40-08:50 Opening remark
Yongyun Hu, chair of Department of Atmospheric and Oceanic Sciences, Peking University
- 08:50-09:05 Publishing and Sharing the Data of Global Change
Junhua Ma, Journal of CAS
- 09:05-09:25 Simulation of Climate in the Last Glacial Maximum and the Middle Holocene
(invited)
Dabang Jiang, Institute of Atmospheric Science (CAS)
- 09:25-09:40 More Frequent Sudden Stratospheric Warming Events due to a Stronger
Madden-Julian Expected in a Warmer Climate
Wanying Kang, Harvard University
- 09:40-09:55 Longitudinal Distribution and Mechanisms of Regional Surface Warming in Dry
and Wet Atmospheric Circulation Models
Juan Li, Peking University
- 09:55-10:10 Two significant stages in the aridification of the eastern Chinese Loess Plateau
since 1.2 Ma
Xiaoqing Meng, China University of Geoscience
- 10:10-10:30 Group Photo
- 10:30-10:40 Coffee Break

Session 2 Oral Presentation

Chair: Zeyu Cui, Tsinghua University

- 10:40-11:00 Preliminary study on the impact of typhoon on climate system (invited)
Yanluan Lin, Tsinghua University
- 11:00-11:15 Socioeconomic and atmospheric factors affecting aerosol radiative forcing:
production-based versus consumption-based perspective
Jingxu Wang, Peking University
- 11:15-11:30 Live poultry trade shapes community-structured transmission of avian influenza in
China
Qiqi Yang, Beijing Normal University

- 11:30-11:45 Observational evidence of contrasting dispersion effect
Meng Zhang, Tsinghua University
- 11:45-12:00 Impact of the construction of the coal banning zone on visibility in the
Beijing-Tianjin-Hebei region
Guangjing Liu, Lanzhou University
- 12:00-13:10 Lunch

Session 3 Oral Presentation

Chair: Wenxi Zhang, Beijing Normal University

- 13:10-13:30 Interdecadal variation of surface solar radiation in China and its influence on
regional warming pattern (**invited**)
Kaicun Wang, Beijing Normal University
- 13:30-13:45 Evaluating Indices of Blocking Anticyclones in Terms of their Linear Relations
with Surface Hot Extremes
Baihua Chen, Harvard University
- 13:45-14:00 Intrinsic and extrinsic drivers of transmission dynamics of hemorrhagic fever with
renal syndrome caused by Seoul hantavirus
Yidan Li, Beijing Normal University
- 14:00-14:15 Astronomical forcing in Early Carnian Epoch and its influence in Carnian Humid
Episode: Evidence from Longchang, South China
Dongyang Liu, China University of Geoscience (Wuhan)
- 14:15-14:30 Analysis of extreme temperature and precipitation events in Yarlung Zangbo River
Basin
Chunyu Liu, Yunnan University
- 14:30-14:45 Coffee Break

Session 4 Oral Presentation

Chair: Jingjing Ren, Peking University

- 14:45-15:00 Uncertainty in the future projections of Pacific-Indian Ocean air-sea coupled
modes: the role of internal variability
Chang Hui, Ocean University of China
- 15:00-15:15 A Comparison of the Westerly Wind Burst between the positive phase and the
negative phase of PDO
Yunhao Shi, Chinese Academy of Meteorological Sciences
- 15:15-15:30 A Record-breaking Extreme Rainfall Event over Southern China During August
2018: Observation and Mechanism Analysis

Zhilin Zeng, Chengdu University of Information Technology

- 15:30-15:45 Effects of Multi-scale climate variability on the change of Blue-spotted Mackerel Resources
Peng Lian, Ocean University of China
- 15:45-16:00 Impact of climate change on historical hydrological elements and future runoff in the source area of the Yellow River
Yan Zhou, Hohai University
- 16:00-17:00 Poster & Coffee Break
- 17:00-17:20 Study on tropical cyclone tornadoes in China (**invited**)
Zhiyong Meng, Peking University
- 17:20-18:00 Awards & Closing Ceremony

International Workshop on Exoplanet

Organized by Jun Yang from Peking University

24 May, 2019

Session 1 Oral Presentation

Chair: Jun Yang, Peking University

- | | |
|-------------|---|
| 08:25-08:30 | Opening remark
Yongyun Hu , chair of Department of Atmospheric and Oceanic Sciences, Peking University |
| 08:30-08:50 | Search for Extraterrestrial Life in the Solar System and Beyond
Yuk L. Yung , Caltech |
| 08:50-09:10 | Atmospheric trends and regimes on exoplanets and brown dwarfs
Xi Zhang , Univ. of California, Santa Cruz |
| 09:10-09:30 | Observations of alkali metals in the atmospheres of low-density exoplanets
Guo Chen , Purple Mountain Observatory |
| 09:30-09:45 | Microwave observations of the giant planets - Cassini/Radar and Juno/MWR
Cheng Li , Caltech |
| 09:45-10:05 | Coffee and cookies |

Session 2 Oral Presentation

Chair: Guo Chen, Purple Mountain Observatory

- | | |
|-------------|---|
| 10:05-10:25 | On the Paleo-Space Weather Effect of Proxima Centauri b
Wang Ip , National Central University |
| 10:25-10:45 | Bottlenecks of Water Loss
Feng Tian , Macau Univ. of Science and Technology |
| 10:45-11:05 | The escape of hydrogen-rich atmosphere of exoplanets
Jianheng Guo , Yunnan Astronomical Observatory |
| 11:05-11:20 | Young and Warm Hydrogen Climates near the inner edge of the Habitable Zone
Daniel Koll , MIT |
| 11:20-11:40 | Coffee and cookies |

Session 3 Oral Presentation

Chair: Feng Long, Peking University

- 11:40-12:00 Constraints on atmospheric losses of closely packed multiple superEarth systems
Douglas Lin, Univ. of California, Santa Cruz
- 12:00-12:15 Seven M Dwarf Eclipsing Binaries with Flare Activity
Li-Ching Huang, National Central University
- 12:15-12:30 Atmospheric escape from M-dwarf exoplanets and implication for habitability
Chuanfei Dong, Princeton University
- 12:30-14:00 Lunch

Session 4 Oral Presentation

Chair: Daniel Koll, MIT

- 14:00-14:20 The Snowball Bifurcation on Tidally Influenced Planets
Dorian Abbot, University of Chicago
- 14:20-14:35 Transition from Eyeball to Snowball Driven by Sea-ice Drift on Tidally Locked Terrestrial Planets
Jun Yang, Peking University
- 14:35-14:55 Dynamics of the global meridional ice flow of Europa's icy shell
Yosef Ashkenazy, Ben Gurion University
- 14:55-15:15 Exo-ocean dynamics and implication for life
Malte Jansen, University of Chicago
- 15:15-15:35 Coffee and cookies

Session 5 Oral Presentation

Chair: Cheng Li, Caltech

- 15:35-15:55 Problems in atmospheric dynamics of extrasolar giant planets and brown dwarfs
Adam Showman, Peking University and University of Arizona
- 15:55-16:15 Deep Vortices in Gaseous Planets
Cai Tao, Macau Univ. of Science and Technology
- 16:15-16:30 Cloud driven atmospheric circulation on brown dwarfs and directly

imaged exoplanets
Xianyu Tan, Oxford University

16:30-16:50 Coffee and cookies

Session 6 Oral Presentation

Chair: Li-Ching Huang, National Central University

16:50-17:10 Water in Permanently Shadowed Regions (PSR) of the Moon: Yes or No?
Ya-Qiu Jin, Fudan University

17:10-17:30 In Situ Formation of Super-Earths and Gas Giant in Minimum Mass
Extrasolar Nebula
Cong Yu, Sun Yat-Sen University

17:30-17:50 The evolution of planetary system after the death of the Sun
Jiwei Xie, Nanjing University

17:50-18:05 New insights in planet formation from ALMA disk observations
Feng Long, Peking University

18:10- Dinner

M212 School of Physics, Peking University

90th Anniversary Ceremony

May 25, 2019

Sunshine Hall, Ho Ying Chie Overseas Exchange Center

Peking University

Saturday, 25 May 2019

Venue: Sunshine Hall, Overseas Exchange Center, Peking University

09:00-10:00	Guests and alumni enter the venue
10:00-10:10	Welcome and introduction of distinguished guests
10:10-10:40	Documentary video “The Ninety-year Journey”
10:40-10:45	Address, Representatives from Peking University
10:45-10:50	Address, Yuanning Gao, Dean, School of Physics, Peking University
10:50-10:55	Address, Huijun Wang, Academician, Chinese Meteorological Society
10:55-11:50	Address, Representatives from domestic institutes and alumni
11:50-11:55	Unveiling of Sjan-Zsi Li statue
11:55-12:00	Summary Remarks, Yongyun Hu, Head, Department of Atmospheric and Oceanic Sciences, School of Physics, Peking University
12:00-12:10	Group photo (At the square in front of Overseas Exchange Center)
12:10	Lunch (At the first floor of Nongyuan Cafeteria, enter through the north gate)

90th Anniversary Symposium

Organized by Jintai Lin from Peking University

May 25-26, 2019

Plenary: W301 School of Physics, Peking University

Session 1,3: W202 School of Physics, Peking University

Session 2,4: M212 School of Physics, Peking University

Saturday, 25 May 2019

Plenary Session

Venue: W301 School of Physics, Peking University

Chair: Zhiyong Meng, Jintai Lin, Peking University

- | | |
|-------------|---|
| 14:00-14:25 | The equatorial quasi-biennial oscillation revisited
Michael Wallace , University of Washington |
| 14:25-14:50 | Debating issues on the future change of ENSO and monsoon
Bin Wang , University of Hawaii |
| 14:50-15:15 | The Development of NTU ultralight radiosonde and Its Possible Applications in Atmospheric Sciences
Po-Hsiung Lin , National Taiwan University |
| 15:15-15:40 | TBD |
| 15:40-16:10 | Coffee Break |
| 16:10-16:35 | Year-to-year variability of summer surface air temperature over central India
Renhe Zhang , Fudan University |
| 16:35-17:00 | Recent trend of Air pollution in China: A sectorially resolved emission-inventory based evaluation
Shu Tao , Peking University |
| 17:00-17:25 | TBD
Nianzhi Jiao , Xiamen University |
| 17:25-17:50 | A convective view of El Nino
Shang-ping Xie , University of California, San Diego |
| 17:50 | Dinner |

Saturday, 26 May 2019

Session 1 Climate

Venue: W202 School of Physics, Peking University

Chair: Jun Yang, Xinyu Wen, Peking University

- 09:00-09:25 Rapid climate change and the Dansgaard-Oeschger Oscillation of glacial climate
W. Richard Peltier, University of Toronto
- 09:25-09:50 Tropospheric temperature changes from satellite MSU/AMSU since 1979
Qiang Fu, University of Washington
- 09:50-10:15 More frequent sudden stratospheric warming events due to enhanced MJO forcing
expected in a warmer climate
Eli Tziperman, Harvard University
- 10:15-10:35 Coffee break
- 10:35-11:00 An overview of the Energy Exascale Earth System Model (E3SM)
Ruby Leung, Pacific Northwest National Laboratory
- 11:00-11:25 Climate predictability and data assimilation
Fuqing Zhang, Penn State University
- 11:25-11:50 Rapidly warming Arctic sea ice over last 30 years: Sea ice thickness feedback
Byung-Ju Sohn, Seoul National University
- 11:50-12:15 On the atmospheric temperature response to CO₂ perturbation
Yi Huang, McGill University

Session 2 Constituents

Venue: M212 School of Physics, Peking University

Chair: Lin Zhang, Jing Li, Peking University

- 9:00-9:25 Methane in the climate system: monitoring emissions from space
Daniel Jacob, Harvard University
- 9:25-9:50 Aerosol connections between distant continental stations
Jost Heintzenberg, Leibniz Institute for Tropospheric Research
- 9:50-10:15 Aerosol climate forcing: Wildfire feedback and brown carbon
Yuhang Wang, Georgia Institute of Technology
- 10:15-10:35 Coffee break
- 10:35-11:00 Anthropogenic drivers of 2013-2017 trends in summer surface ozone in China
Hong Liao, Nanjing University of Information Science & Technology

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|-------------|---|
| 11:00-11:25 | Aerosol nucleation: Bridging sub-nanoscale processes to regional and global-scale impacts
Fangqun Yu , State University of New York at Albany |
| 11:25-11:50 | Climate extremes and aerosols: Attribution of the past and compound impact in the future
Yangyang Xu , Texas A&M University |
| 11:50-12:15 | Uncertainty analysis and integration of multi-sensor aerosol remote sensing products
Jing Li , Peking University |
| 12:15-14:00 | Lunch |

Session 3 Ocean

Venue: W202 School of Physics, Peking University

Chair: Jun Yang, Yonggang Liu, Peking University

- | | |
|-------------|---|
| 14:00-14:25 | Eddy saturation of the Antarctic Circumpolar Current
David Marshall , Oxford University |
| 14:25-14:50 | A theory for seasonal predictability barrier
Zhengyu Liu , The Ohio State University |
| 14:50-15:15 | Ocean mixing and dispersion: insights from Lagrangian dynamics
Hezi Gildor , Hebrew University |
| 15:15-15:40 | Indo-Pacific maritime continent: A hot spot of global weather-climate
Chidong Zhang , Seattle, WA, USA |
| 15:40-16:10 | Coffee Break |
| 16:10-16:35 | How Arctic sea ice decline and Indian Ocean warming affect the Atlantic meridional overturning circulation (AMOC)
Alexey Fedorov , Yale University |
| 16:35-17:00 | Decadal impact of including ocean surface currents in bulk formulas on air-sea fluxes and ocean general circulation
Xiaoming Zhai , University of East Anglia |
| 17:00-17:25 | Understanding the role of large-scale atmospheric circulation in weather extremes
Gang Chen , University of California, Los Angeles |
| 17:25-17:50 | Impact of dust on global climate in different periods of the Earth history
Yonggang Liu , Peking University |

Session 4 Tropics

Venue: M212 School of Physics, Peking University

Chair: Xinyu Wen, Ji Nie, Peking University

- | | |
|-------------|---|
| 14:00-14:25 | Madden-Julian Oscillations in state-of-the art climate models
Tim Li , University of Hawaii |
| 14:25-14:50 | Debating issues on the future change of ENSO and monsoon
Shuyi Chen , University of Washington |
| 14:50-15:15 | Global determination of convective mass flux: A new approach and applications
Zhengzhao Luo , City University of New York |
| 15:15-15:40 | Tropical cyclone Intensity change and implications for US and China coastal regions
Mingfang Ting , Columbia University |
| 15:40-16:10 | Coffee Break |
| 16:10-16:35 | The desert-monsoon climate system: new paradigm
William Lau , University of Maryland |
| 16:35-17:00 | Regional energy budget control of tropical rainfall maxima: application to mid-Holocene rainfall and modern-day SPCZ shifts
William Boos , University of California, Berkeley |
| 17:00-17:25 | The incredible lightness of water vapor
Da Yang , University of California, Davis |
| 17:25-17:50 | A deeper understanding of climatic changes of extreme precipitation
Ji Nie , Peking University |
| 17:50 | Dinner |

**Summer School on Multiscale Convection
of the Severe Weather International Consortium
(SWIC)**

**Organized by Zhiyong Meng from Peking University
and Fuqing Zhang from Pennsylvania State University**

27–30 May, 2019

W301 School of Physics, Peking University

Monday, 27 May 2019

Venue: W301 School of Physics, Peking University

08:10-08:30	Opening address and introduction
08:30-10:00	Convection and weather Fuqing Zhang , Pennsylvania State University
10:00-10:30	Group Photo & Break
10:30-12:20	Convection and climate Ruby Leung , Pacific Northwest National Laboratory
12:20-13:30	Lunch
13:30-15:00	Coupling of gravity waves and convection Fuqing Zhang , Pennsylvania State University
15:00-15:20	Break
15:20-16:50	Modeling of convective precipitation in regional and global climate models Ruby Leung , Pacific Northwest National Laboratory
16:50-17:20	Emergence of convectively coupled synoptic-scale disturbances from the Asian monsoon basic state William Boos , University of California, Berkeley
17:20	Discussion

Tuesday, 28 May 2019

Venue: W301 School of Physics, Peking University

08:40-10:10	Impacts of aerosol-cloud and land-atmosphere interactions on hydroclimate Ruby Leung , Pacific Northwest National Laboratory
10:10-10:30	Break
10:30-12:00	Limits of atmospheric predictability Fuqing Zhang , Pennsylvania State University
12:00-13:30	Lunch
13:30-15:00	Ensemble Data Assimilation for Severe Storms with Radar and Satellite Yunji Zhang , Pennsylvania State University
15:00-15:20	Break
15:20-16:50	A Tutorial for Tornado Damage Survey Zhiyong Meng , Peking University; Lanqiang Bai , Sun Yat-Sen University
16:50	Discussion

Wednesday, 29 May 2019

Venue: W301 School of Physics, Peking University

08:40-10:10	Potential Vorticity (PV) Dynamics Chris Davis , National Center for Atmospheric Research
10:10-10:30	Break
10:30-12:00	PV and Moist Convection Chris Davis , National Center for Atmospheric Research
12:00-13:30	Lunch
13:30-15:00	Tropical Cyclone Data Assimilation Robert Nystrom , Pennsylvania State University
15:00-15:20	Break
15:20-17:10	Tropical Cyclone Formation Chris Davis , National Center for Atmospheric Research
17:10	Discussion

Thursday, 30 May 2019

Venue: W301 School of Physics, Peking University

08:40-10:10	Ordinary Convective Cells Richard Rotunno , National Center for Atmospheric Research
10:10-10:30	Break
10:30-12:00	Global distribution of convective systems from satellites Chuntao Liu , Texas A&M University - Corpus Christi
12:00-13:30	Lunch
13:30-15:00	Squall Lines Richard Rotunno , National Center for Atmospheric Research
15:00-15:20	Break
15:20-16:50	Supercells Richard Rotunno , National Center for Atmospheric Research
16:50	Discussion

End of Summer School

**3rd International Workshop of the Severe Weather
International Consortium (SWIC)**

**Organized by Zhiyong Meng from Peking University
and Fuqing Zhang from Pennsylvania State University**

31 May–2 June, 2019

W301 School of Physics, Peking University

Friday, 31 May 2019

Venue: W301 School of Physics, Peking University

Opening Ceremony

Chair: Zhiyong Meng, Peking University

08:30-09:00 Opening address and introduction

Session 1 Convection Predictability

Chair: Zhiyong Meng, Peking University

09:00-09:30 Predictability of Convection

Richard Rotunno, National Center for Atmospheric Research (**Keynote**)

09:30-10:00 A new theoretical framework for understanding multi scale atmospheric predictability

Fuqing Zhang, Pennsylvania State University (**Keynote**)

10:00-10:20 Improving analysis and probabilistic prediction of a severe thunderstorm event using remote-sensing observations with an ensemble Kalman filter

Yunji Zhang, Pennsylvania State University

10:20-10:50 Group Photo & Coffee Break

Session 2 Convection Forecast

Chair: Shuguang Wang, Nanjing University & Columbia University

10:50-11:20 Predictor Reconstitution Method for Weather Forecasting in the Alpine Region

Pingwen Zhang, Peking University (**Keynote**)

11:20-11:40 Review of Severe Convective Weather Prediction over China since 1950

Xiaoling Zhang, National Meteorological Center

11:40-12:00 Convective Storm Nowcasting Using a Deep Learning Approach

Lei Han, Ocean University of China

12:00-13:30 Lunch Break

Session 3 Convection Modeling

Chair: Jianhua Sun, Institute of Atmospheric Physics

13:30-14:00 Large-eddy Simulation of Extreme Updrafts in the Tropical Cyclone Eyewall

Liguang Wu, Fudan University (**Keynote**)

14:00-14:20 The aerosol-cloud interaction in deep convective systems

Huiwen Xue, Peking University

- 14:20-14:40 Key Elements of Turbulence Closures for Simulating Deep Convection at Kilometer-Scale Resolution
Xiao Ming Shi, Hong Kong University of Science and Technology
- 14:40-15:00 Beyond Traditional Limits of Gravity Wave Parameterizations
Junhong Wei, Sun Yat-Sen University
- 15:00-15:20 Progresses of CMA GRAPES Mesoscale Ensemble Prediction System
Jing Chen, Numerical Weather Prediction Center, CMA
- 15:20-15:40 Coffee Break

Session 4 Convection Climatology

Chair: Yunji Zhang, Pennsylvania State University

- 15:40-16:10 The effects of boundary layer inertial oscillation on precipitation diurnal cycles in different parts of China
Ming Xue, University of Oklahoma (**Keynote**)
- 16:10-16:30 Hailstorms in China: climatology, long-term trend and predictability
Qinghong Zhang, Peking University
- 16:30-16:50 Organizational Modes of Severe Wind-producing Convective Systems over North China
Jianhua Sun, Institute of Atmospheric Physics
- 16:50-17:10 A Database of Convection Initiation in South China
Lanqiang Bai, Sun Yat-Sen University
- 17:10-17:30 How Boundary Layer Convergence Lines and Their Associated Convection Respond to Sharp Vegetation Contrast: A Five-Year Summertime Radar Climatology
Yipeng Huang, Xiamen Meteorological Bureau

Saturday, 1 June 2019

Venue: W301 School of Physics, Peking University

Session 5 Convection Environment

Chair: Yali Luo, Chinese Academy of Meteorological Sciences

- 08:30-09:00 Mesoscale Convective Systems and Their Large-Scale Environments
Ruby Leung, Pacific Northwest National Laboratory (**Keynote**)
- 09:00-09:30 Large-scale thermodynamic environments favoring intense convection: A perspective from satellite observations
Chuntao Liu, Texas A&M University - Corpus Christi (**Keynote**)
- 09:30-09:50 Deep convection and flow regimes over tropical islands
Shuguang Wang, Nanjing University & Columbia University
- 09:50-10:10 The Mid-latitude influences on the formation of the monsoon gyre in August 1991
Xuyang Ge, Nanjing University of Information Science & Technology
- 10:10-10:30 Coffee Break

Session 6 Heavy Rainfall I

Chair: Kun Zhao, Nanjing University

- 10:30-11:00 Urbanization and extreme rainfall
Dalin Zhang, Maryland University (**Keynote**)
- 11:00-11:20 Synoptic analysis of extreme hourly precipitation in China mainland and Taiwan
Yali Luo, Chinese Academy of Meteorological Sciences
- 11:20-11:40 Regional features of extreme precipitation: adiabatic forcing and diabatic feedback
Ji Nie, Peking University
- 11:40-12:00 Warm-sector heavy rainfall and LLJ
Zhiyong Meng, Peking University
- 12:00 Lunch Break

Session 7 Heavy Rainfall II

Chair: Guixing Chen, Sun Yat-Sen University

- 13:30-14:00 A comparison of the rainfall forecasting skills of the WRF ensemble forecasting system using SPCPT and other cumulus parameterization error representation schemes
Jinzhong Min, Nanjing University of Information Science & Technology
(Keynote)
- 14:00-14:20 Developing atmospheric large-scale forcing data for single-column and loud resolving modeling and precipitation processes
Donghai Wang, Sun Yat-Sen University
- 14:20-14:40 Impacts of mesoscale orography on the summer precipitation in East China
Xin Xu, Nanjing University
- 14:40-15:00 How do weak or dry landfalling tropical cyclones produce heavy rainfall over China
Shoujuan Shu, Zhejiang University
- 15:00-15:20 Coffee Break

Session 8 Heavy Rainfall III

Chair: Chuntao Liu, Texas A&M University - Corpus Christi

- 15:20-15:50 A progress about WMO/UPDRAT
Yuan Wang, Nanjing University **(Keynote)**
- 15:50-16:10 Influence of Synoptic Pattern and Low-Level Wind Speed on Intensity and Diurnal Variations of Summer Rainfall along the Coast of South China
Kun Zhao, Nanjing University
- 16:10-16:30 Diurnal cycle of the successive MCSs in response to large-scale circulation over East Asia
Guixing Chen, Sun Yat-Sen University
- 16:30-16:50 Impact of Gravity Waves on Diurnal Cycle of Rainfall near the Coasts
Yu Du, Sun Yat-Sen University
- 16:50-17:10 Impact of moisture and surface wind on the diurnal variability of precipitation over Hainan Island
Lei Zhu, Nanjing University of Information Science & Technology
- 17:10-17:30 Predictability, Uncertainties and Underlying Dynamics in the Limited Predictability of the Record-Breaking Intensification of Hurricane Patricia (2015)
Robert Nystrom, Pennsylvania State University

Sunday, 2 June 2019

Venue: W301 School of Physics, Peking University

Session 9 Tropical Cyclone I

Chair: Qinghong Zhang, Peking University

- 08:30-09:00 The Basic Mechanism of Tropical Cyclone Formation
Chris Davis, National Center for Atmospheric Research (**Keynote**)
- 09:00-09:30 The Air-Sea Interaction and Formation of the Secondary Eyewall in Typhoon Sinlaku of 2009
Hancheng Lu, National University of Defense Technology (**Keynote**)
- 09:30-09:50 The diurnal cycle and gravity waves during the formation of Typhoon Megi (2010)
Juan Fang, Nanjing University
- 09:50-10:10 Impacts of the Diurnal Radiation Contrast on the Formation, Intensification and Structure of TC
Xiaodong Tang, Nanjing University
- 10:10-10:30 Coffee Break

Session 10 Tropical Cyclone II

Chair: Juan Fang, Nanjing University

- 10:30-11:00 Intensification Variability of Tropical Cyclones in Directional Shear Flows: Vortex Tilt-Convection Coupling
Zhemín Tan, Nanjing University (**Keynote**)
- 11:00-11:30 Why is the progress in improving tropical cyclone intensity forecast so slow, and any hope?
Yuqing Wang, Hawaii University (**Keynote**)
- 11:30-11:50 Targeted observing to improve typhoon forecasts using FY-4A satellite
Wei Han, National Meteorological Center
- 11:50 Lunch Break

End of the Workshop

**Distinguished Guests
To Attend
90th Anniversary Ceremony
of
Atmospheric Sciences of Peking University**

Distinguished Guests	
Name	Affiliation
Dorian Abbot	University of Chicago
Yosef Ashkenazy	Ben Gurion University
William Boos	University of California, Berkeley
Alexey Fedorov	Yale University
Hezi Gildor	Hebrew University
Jost Heintzenberg	Leibniz Institute for Tropospheric Research
Daniel Jacob	Harvard University
Malte Jansen	University of Chicago
Daniel Koll	Massachusetts Institute of Technology
William Lau	University of Maryland
Ruby Leung	Pacific Northwest National Laboratory
Douglas Lin	University of California, Santa Cruz
David Marshall	Oxford University
W. Richard Peltier	University of Toronto
Byung-Ju Sohn	Seoul National University
Eli Tziperman	Harvard University
J. Mike Wallace	University of Washington
Bin Wang	University of Hawaii
Shangping Xie	University of California, San Diego
Yuk L. Yung	California Institute of Technology

Xiaoming Zhai	University of East Anglia
Fuqing Zhang	The Pennsylvania State University
蔡涛	澳门科技大学
Tao Cai	Macau University of Science and Technology
程晓	北京师范大学全球变化与地球系统科学研究院
Xiao Cheng	College of Global Change and Earth System Science, Beijing Normal University
林龙福	北京应用气象研究所
Longfu Lin	Beijing Institute of Applied Meteorology
范广洲	成都信息工程大学大气科学学院
Guangzhou Fan	College of Atmospheric Sciences, Chengdu University of Information Technology
孙彦坤	东北农业大学资源与环境学院
Yankun Sun	College of Resources and Environment, Northeast Agricultural University
温之平	复旦大学大气与海洋科学系
Zhiping Wen	Department of Atmospheric and Oceanic Sciences, Fudan University
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Map of PKU CAMPUS

北京大学物理学院大气与海洋科学系地图位置



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Map of Department of Atmospheric and Oceanic Sciences, School of Physics, Peking University

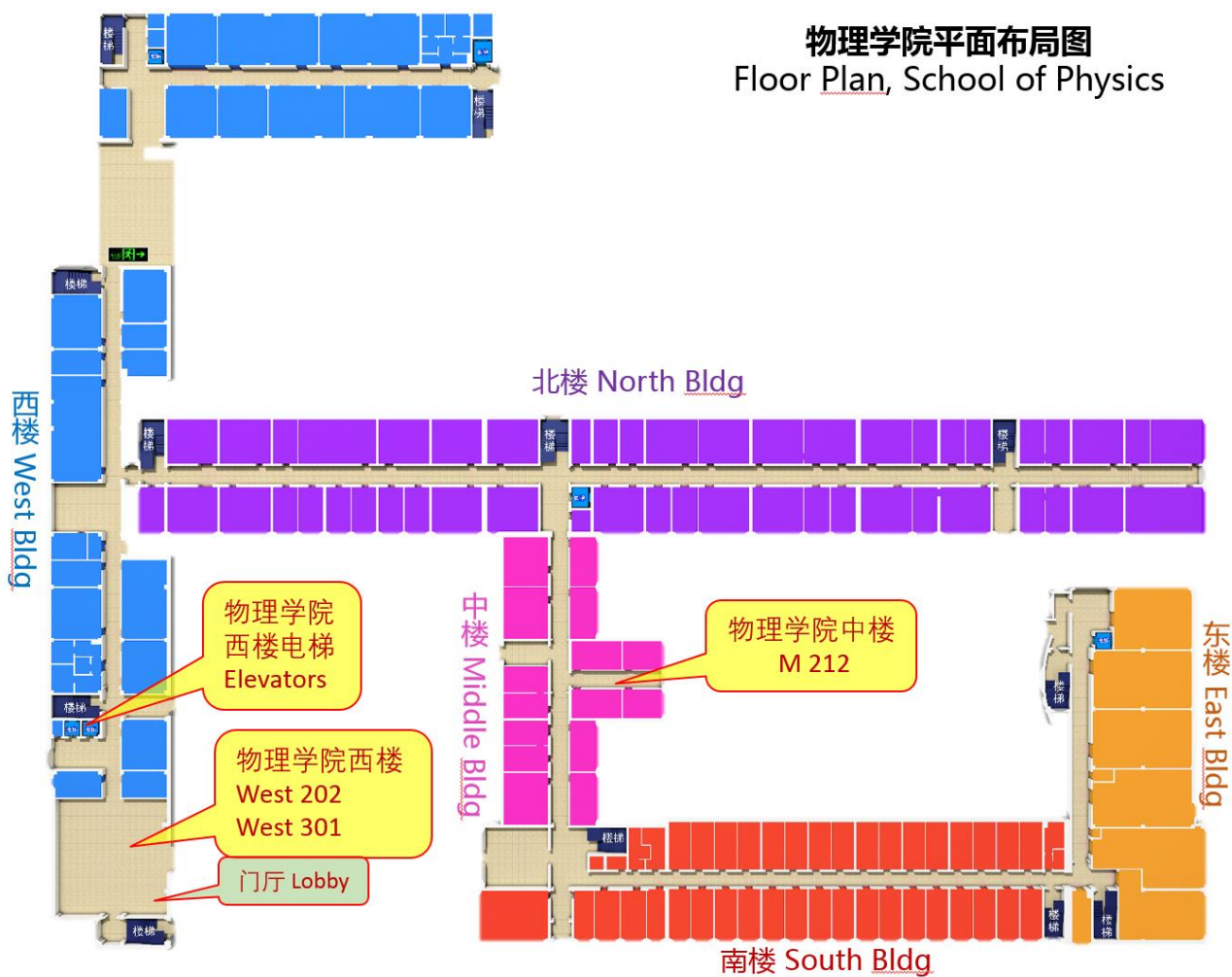


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Map of SCHOOL OF PHYSICS

物理学院平面布局图
Floor Plan, School of Physics



Traffic Instructions

From Beijing Capital International Airport to School of Physics, Peking University

1. By taxi: The distance between the airport and Peking University is about 30 kilometers. It takes about 45 minutes and costs about ¥120.
2. By subway: Take the Beijing Subway Airport Express (costs ¥25) to Sanyuanqiao(三元桥) Station, transfer to Line 10 (costs ¥3 ~5) to Haidian Huangzhuang Station (海淀黄庄), then transfer to Line 4 (towards Anheqiao North Station (安河桥北)) and get off at the East Gate of Peking University Station (北京大学东门). Exit from the Exit B to the School of Physics.

From high-speed railway station to School of Physics, Peking University

1. Beijing Station: Take Line 2 (inner ring) to the Xuanwu Gate Station (宣武门), transfer to Line 4 (towards Anheqiao North Station (安河桥北)) and get off at the East Gate of Peking University Station (北京大学东门). Exit from the Exit B to the School of Physics.
2. Beijing South Railway Station (北京南站): Take Line 4 and get off at the East Gate of Peking University Station (北京大学东门). Exit from the Exit B to the School of Physics.
- 3 Beijing West Railway Station (北京西站): Take Line 9 to the National Library Station (国家图书馆), transfer to Line 4 (towards Anheqiao North Station (安河桥北)) and get off at the East Gate of Peking University Station (北京大学东门). Exit from the Exit B to the School of Physics.