# **PROGRAMME**

Date 日期	Time 时间	Events 事项		Location 地点
October 25, Friday	14:00-20:00	On-site Registration 现场注册		Junyi Dynasty Hotel 月大饭店一层大厅
10月25日	18:00-19:30	Dinner 晚餐		nou Restaurant 五洲餐厅
	08:30-11:50	Opening Session 开幕式 Keynote Session 主旨报告	4th Floor, W	eidou Hall /HU Library IS Branch 科学分馆四层北斗厅
	12:00-13:30	Lunch 午餐	_	yuan Restaurant ]湖园餐厅
October 26, Saturday 10 月 26 日		Session 1: Polar surveying, mapping, remote sensing and geoinformation intelligent service 专题 1: 极地测绘遥感与地理信息智能服务	Room 224 224 教室	Teaching Building 1 信息学部 1 教学楼
107,120 円	14:00-17:40	Session 4: Polar ecological environmental changes 专题 4: 极地生态环境变化	Room 108 108 教室	(Coffee Break,
		Session 6: Polar regions and humans 专题 6: 极地公共治理	Room 119 119 教室	Room 211)
	18:00-19:30	Welcome Dinner 欢迎晚宴	6th Floor,	onghu Hall Junyi Dynasty Hotel 大饭店六层东湖厅
		Session 2: Polar ice sheets and sea level changes 专题 2: 极地冰盖与海平面变化	Room 224 224 教室	Teaching Building 1 信息学部 1 教学楼 (Coffee Break, Room 211)
	08:30-12:00	Session 3: Polar sea ice change 专题 3: 极地海冰	Room 108 108 教室	
		Session 5: The cryosphere and global change 专题 5: 冰冻圈与全球变化	Room 119 119 教室	
October 27, Sunday	12:10-13:30	Lunch 午餐	_	yuan Restaurant ]湖园餐厅
10月27日		Session 2 (Continued) 专题 2	Room 224 224 教室	Teaching Building 1
	13:30-18:00	Session 3 (Continued) 专题 3	Room 108 108 教室	信息学部 1 教学楼 (Coffee Break, Room 211)
		Session 5 (Continued) 专题 5	Room 119 119 教室	
	18:10-19:30	Dinner 晚餐		nou Restaurant 五洲餐厅

## October 26, Saturday 10 月 26 日,星期六

8:30-11:50	<b>Opening Session and Keynote Session</b>	Beidou Hall
		图书馆北斗厅

Opening Sessio Session Chair: >		
		Kim Johan Holmen
8:30-8:40	Speech on behalf of the Scientific Committee	Co-Chair Norwegian Polar Institute, Norway
8:40-8:50	Speech on behalf of the Department of International Cooperation, the Ministry of Natural Resources of China	CHEN Danhong  Director-General  Ministry of Natural Resources of China, China
8:50-9:00	Speech on behalf of Wuhan University	CHU Longqiang  Deputy Party Secretary  Wuhan University, China
9:00-9:30	Departure ceremony for the WHU members of the 41st Chinese Antarctic Research Expedition Team	
9:30-9:50	Coffee break	
Keynote Session Session Chair: 2	n ZHANG Xiaohong	
9:50-10:20	SK-1: Shaping Antarctic Governance: The Role of Science in Policy Development	Yeadong Kim  Korea National Committee on Polar Research, Korea
10:20-10:50	SK-2: Contemporary Polar Ice-Sheet Mass Balance Estimates: A Perspective	C. K. Shum  The Ohio State University, USA
10:50-11:20	SK-3: The Driving Forces of the Arctic Order: the Climate Crisis or the Geopolitical Competition?	YANG Jian Shanghai Institutes for International Studies, China
11:20-11:50	SK-4: Geodetic Studies of Glacier Mass Change and GIA	Jeffrey Freymueller Michigan State University, USA
12:00-13:30	Lunch (Xinghuyuan Restaurant)	

Session 1-1: Polar Surveying, mapping, remote sensing and geoinformation intelligent service Session Chair: QIU Yubao, CUI Yingchun		
14:00-14:25	Invited S1-1-1: The first aerial photogrammetry of Snow Eagle 601 in Antarctica	CUI Yingchun  Polar Research Institute of China, China
14:25-14:50	Invited S1-1-2: Application of deep learning in the polar cryosphere	YU Lejiang  Polar Research Institute of China, China
14:50-15:10	S1-1-3: Lake responses to cryospheric and climate change	Shoukat Ali Shah  Mehran University of Engineering and Technology, Pakistan
15:10-15:30	S1-1-4: Progress and key technologies of undersea feature names in Antarctica	LI Yanwen  National Marine Data and Information Service, China
15:30-15:50	Coffee break (Room 211)	
Session 1-2: Polar Surveying, mapping, remote sensing and geoinformation intelligent service Session Chair: CUI Meng, YU Lejiang		
15:50-16:15	Invited S1-2-1: Digital environmental for the operations over high mountain and polar cold reigons	QIU Yubao  Aerospace Information Research Institute, Chinese Academy of Sciences, China
16:15-16:40	Invited S1-2-2: Small Svalbard glaciers in a changing Arctic: when extreme events become the norm	Florian Tolle University of Franche Comté, France
16:40-17:00	S1-2-3: Polar route planning method based on satellite remote sensing data	CUI Meng  Marine Design & Research Institute of China, China
17:00-17:20	S1-2-4: Prediction analysis of potential locations of Antarctic meteorites based on machine learning	<b>LI Outong</b> Wuhan University, China
17:20-17:40	S1-2-5: Exploration of Polar Surveying Mode for Unmanned or One-man Operations	<b>DU Weigang</b> South Surveying & Mapping Technology Co., Ltd., China
18:00-19:30	Welcome Dinner (Junyi Dynasty Hotel)	

### Session 4

	ar ecological environmental changes GENG Lei, PENG Fang	
14:00-14:25	Invited S4-1-1: Climate change driven Arctic CO <sub>2</sub> uptake and acidification	<b>QI Di</b> Jimei University, China
14:25-14:45	S4-1-2: Remote sensing monitoring of Arctic lake drainage events and investigation of ecological tipping points	<b>LIU Aobo</b> Shandong Normal University, China
14:45-15:05	S4-1-3: Evaluation of the spatial and temporal dynamics of ecological vulnerability in the Ice-free zone of Antarctica	FANG Xiaoling Wuhan University, China
15:05-15:25	S4-1-4: Remote forcing from tropical Atlantic contributed to the Adélie Penguin population changes in the Ross Sea	LIU Hongwei  University of Science and Technology of China, China
15:30-15:50	Coffee break (Room 211)	
	ar ecological environmental changes QI Di, HAO Weifeng	
15:50-16:15	Invited S4-2-1: Probing large scale changes in atmospheric oxidation capacity and the driving forces using ice core records	<b>GENG Lei</b> University of Science and Technology of China, China
16:15-16:35	S4-2-2: Pan-Antarctic pioneer plants information extraction	Alatan Zhula Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences, China
16:35-16:55	S4-2-3: Antarctic Ardley Island Terrace — an ideal place to study the marine to terrestrial succession of microbial communities	PENG Fang Wuhan University, China
18:00-19:30	Welcome Dinner (Junyi Dynasty	Hotel)

Session 6

Session 6-1: Po Session Chair: L	lar regions and humans IU Lanfeng	
14:00-14:25	Invited S6-1-1: Research on synergistic governance of resource development and ecological protection in the Arctic under the perspective of green development	YANG Zhenjiao Ocean University of China, China
14:25-14:45	S6-1-2: Great powers competition and governance in Arctic	RUAN Jianping Wuhan University, China
14:45-15:05	S6-1-3: Development and improvement of Chilean Antarctic legislation–focusing on Law No. 21255	WU Ningbo Shanghai University of International Business and Economics, China
15:05-15:25	S6-1-4: The BBNJ Agreement's impact on the Arctic governance and China's response	<b>GUO Ran</b> Shanghai Maritime University, China
15:30-15:50	Coffee break (Room 211)	
Session 6-2: Po Session Chair: \	lar regions and humans 'ANG Zhenjiao	
15:50-16:15	Invited S6-2-1: Antarctic resources: exploitation, regulation and prospects	Borislava Valentinova Vankova Bulgarian Ministry of Education and Science, Bulgaria
16:15-16:35	S6-2-2: Analysis of Southern Ocean governance	<b>LIU Lanfeng</b> Guangdong University of Foreign Studies, China
16:35-16:55	S6-2-3: New trends in Antarctic multilateral governance	CHEN Chen China University of Political Science and Law, China
16:55-17:15	S6-2-4: Arctic governance and China's Arctic policy under the background of Russia-Ukrain war	ZHAO Ningning  Central China Normal University, China
18:00-19:30	Welcome Dinner (Junyi Dynasty Hotel)	

### October 27, Sunday 10 月 27 日,星期日

8:30-18:00	Session2	Room 224, Teaching Building 1
		一教学楼 224 室

	lar ice sheets and sea level changes WANG Zhaoming	
8:30-8:55	Invited S2-1-1: Greenland ice sheet mass balance revealed by GNSS and gravity	RAN Jiangjun Southern University of Science and Technology, China
8:55-9:20	Invited S2-1-2: Decoding seasonal glacier dynamics at Greenland with physics-informed machine learning and remote sensing	<b>Bryan Riel</b> Zhejiang University, China
9:20-9:40	S2-1-3: Monitoring and understanding ice sheet mass change using satellite geodetic methods	<b>ZHANG Bao</b> Wuhan University, China
9:40-10:00	S2-1-4: Antarctic surface mass balance during the past three centuries and its impact on global sea level rise	WANG Yetang Shandong Normal University, China
10:00-10:20	S2-1-5: Improved depth-albedo parameterization for supraglacial lake model: an application of bottom ablation estimation on the Greenland ice sheet	<b>WU Jiake</b> Sun Yat-sen University, China
10:20-10:40	Coffee break (Room 211)	
Session 2-2: Po Session Chair: I	ar ice sheets and sea level changes	
	o itt statisjati	
10:40-11:05	Invited  S2-2-1: Interannual salinity variability on the Ross Sea continental shelf in a regional ocean-sea ice-ice shelf model	WANG Zhaomin Southern Marine Science and Engineering Guangdong Laboratory (Zhuhai), China
10:40-11:05 11:05-11:25	Invited S2-2-1: Interannual salinity variability on the Ross Sea continental shelf in a regional ocean-sea ice-ice shelf	Southern Marine Science and Engineering Guangdong
	Invited S2-2-1: Interannual salinity variability on the Ross Sea continental shelf in a regional ocean-sea ice-ice shelf model  S2-2-2: Iceberg calving of Antarctic ice shelves driven	Southern Marine Science and Engineering Guangdong Laboratory (Zhuhai), China
11:05-11:25	Invited S2-2-1: Interannual salinity variability on the Ross Sea continental shelf in a regional ocean-sea ice-ice shelf model  S2-2-2: Iceberg calving of Antarctic ice shelves driven and enhanced by strong ice-ocean interaction  S2-2-3: 30-year surface elevation changes for the Greenland and Antarctic Ice Sheet from multiple satellite	Southern Marine Science and Engineering Guangdong Laboratory (Zhuhai), China  LIU Yan Beijing Normal University, China  ZHANG Baojun

Session 2-3: Po	lar ice sheets and sea level changes ZHENG Lei	
13:40-14:05	Invited S2-3-1: Potential link between the stratospheric ozone and snow chemistry in Antarctica	SHI Guitao East China Normal University, China
14:05-14:30	Invited S2-3-2: Unveiling the crust and lithosphere hidden beneath the Antarctic ice sheet with aerogeophysical and satellite imaging	Fausto Ferraccioli  National Institute of Oceanography and Applied Geophysics, Italy
14:30-14:50	S2-3-3: Ice and subglacial bedrock drilling project at Princess Elizabeth Land, East Antarctica	ZHANG Nan Jilin University, China
14:50-15:10	S2-3-4: Reconstructing daily snow and ice albedo series for Greenland by coupling spatiotemporal and physics-informed models	YE Fan  China University of Geosciences, China
15:10-15:30	S2-3-5: A continuous piecewise fitting algorithm for trend changing points detection in sea level	XIAO Mingyu Wuhan University, China
15:30-15:50	Coffee break (Room 211)	
Session Chair: \$	Invited  S2-4-1: Retained meltwater in Greenland ice sheet:	ZHENG Lei
13.30 10.13	remote sensing and numerical simulation	Sun Yat-sen University, China
16:15-16:40	Invited S2-4-2: A new way of monitoring Greenland mass changes using the GNET GNSS network	Valentina R. Barletta  Technical University of Denmark, Demark
16:40-17:00	S2-4-3: Insights into the capabilities of new photon-counting altimetry satellite ICESat-2 using multi-sensor observations over Antarctic Ice Sheet	QIAO Gang Tongji University, China
17:00-17:20	S2-4-4: Geodetic observations of multi-timescale variations of the Greenland ice sheet	LI Zhen Innovation Academy for Precision Measurement Science and Technology, Chinese Academy of Sciences, China
17:20-17:40	S2-4-5: High-resolution GRACE solutions reveal recent Greenland glacier mass loss	WU Haotian Southern University of Science and Technology, China
17:40-18:00	S2-4-6: Extraction and analysis of crevasses in Antarctic ice sheet based on SAR satellite images	PENG Boyang Wuhan University, China
18:10-19:30	Dinner (Wuzhou Restaurant)	

8:30-17:35	Session 3	Room 108, Teaching Building 1
		一教学楼 108 室

Session 3-1: Po Session Chair: )	lar sea ice changes (U Shiming	
8:30-8:55	Invited S3-1-1: Technologies and applications of polar Air-ice-sea stereo cooperative monitoring	DOU Yinke  Taiyuan University of Technology, China
8:55-9:15	S3-1-2: Sea ice concentration extracted from marine radar footage during CHINARE2023	<b>QU Meng</b> Polar Research Institute of China, China
9:15-9:35	S3-1-3: Estimating multi-scale sea ice density during the MOSAiC expedition	<b>ZHOU Yi</b> Shanghai Jiao Tong University, China
9:35-9:55	S3-1-4: Changing sea ice conditions have impacted the air-ice/ocean turbulent exchanges over the Arctic Ocean	ZHANG Zhilun Sun Yat-sen University, China
9:55-10:15	S3-1-5: Sea ice classification in the Arctic transition zone using HaiYang-2B microwave scatterometer and radiometer data	WU Shiyu Wuhan University, China
10:20-10:40	Coffee break (Room 211)	
Session 3-2: Po Session Chair: 0	lar sea ice changes QU Meng	
10:40-11:05	Invited S3-2-1: Observing Antarctic sea ice mass balance with satellite remote sensing	XU Shiming Tsinghua University, China
11:05-11:25	S3-2-2: Retrieval algorithm for Arctic sea ice surface melt and freeze onset using FY-3B&3D microwave radiometer imager data	QU Zhifeng Ocean University of China, China
11:25-11:45	S3-2-3: Polar sea ice leads detection using deep learning with MODIS imagery	WANG Yueyun Wuhan University, China
11:25-11:45		-

Session 3-3: Po Session Chair: I	lar sea ice changes .IU Tingting	
13:50-14:10	S3-3-1: Multiscale and integrated sea ice observations and prediction models: the Norway – China collaboration initiative Digital Sea Ice	Are Frode Kvanum University of Oslo, Norway
14:10-14:30	S3-3-2: A monthly Arctic sea ice thickness product from 1995 to 2023 using multiple radar altimetry data	XIAO Feng Wuhan University, China
14:30-14:50	S3-3-3: Trends, seasonal and interannual variability of Arctic melt pond fraction among different products	QIN Yuqing Ocean University of China, China
14:50-15:10	S3-3-4: The impacts of anomalies in atmospheric circulations on Arctic sea ice outflow and sea ice conditions in the Barents and Greenland seas: case study in 2020	ZHANG Fanyi Wuhan University, China
15:10-15:30	S3-3-5: Spatio-temporal matching methods for estimating snow depth on the Arctic sea ice integrating laser and radar satellite altimetry measurements	<b>GENG Tong</b> Wuhan University, China
15:30-15:50	Coffee break (Room 211)	
	lar sea ice changes ZHANG Shengkai	
15:50-16:15	Invited S3-4-1: Cryosphere remote sensing - validation studies for land ice and sea ice in the Ross Sea sector	Wolfgang Rack University of Canterbury, New Zealand
16:15-16:35	S3-4-2: Comparison of sea ice detection based on HY-2B and CFOSAT scatterrometer data	JIANG Chengfei  National Marine Data Information Center, China
16:35-16:55	S3-4-3: Annual evolution of the ice—ocean interaction beneath landfast ice in Prydz Bay, East Antarctica	<b>HU Haihan</b> Sun Yat-sen University, China
16:55-17:15	S3-4-4: SMOS multi-Tie points-based method for retrieving the Arctic thin sea ice thickness	<b>LI Jiaxing</b> Wuhan University, China
17:15-17:35	S3-4-5: Key technologies of the S-411 ice information navigation service in the Arctic sea route	JIAO Chenchen Wuhan University, China
18:10-19:30	Dinner (Wuzhou Restauran	t)

8:30-17:15	Session 5	Room 119, Teaching Building 1
		一教学楼 119 室

Session 5-1: The Session Chair: 2	e cryosphere and global change 'HU Yannian	
8:30-8:55	Invited S5-1-1: High-precision estimation of cloud properties and surface radiation balance in three polar regions based on multi-source satellites	HUSI Letu  Aerospace Information Research Institute, Chinese Academy of Sciences, China
8:55-9:15	S5-1-2: Model simulation of the aerosol perturbation on convective precipitation over the Tibetan Plateau	JIANG Mengjiao Chengdu University of Information Technology, China
9:15-9:35	S5-1-3: The impact of Arctic sea ice reduction and Tibetan Plateau warming on summer extreme precipitation dipole patterns in mid-latitude Asia	MA Qianrong Yangzhou University, China
9:35-9:55	S5-1-4: Association of Tibetan heat sources with heat waves in China	TAN Ziyuan Lanzhou University, China
9:55-10:15	S5-1-5: Polar tropopause modulation by planetary waves based on radiosonde observations	WANG Rui Polar Research Institute of China, China
10:20-10:40	Coffee break (Room 211)	
Session 5-2: The Session Chair: N	e cryosphere and global change MAO Feiyue	
10:40-11:05	Invited S5-2-1: Regulating effect of surface albedo on aerosol radiation in Arctic region	ZHAO Chuanfeng Peking University, China
11:05-11:30	Invited S5-2-2: Hidden large aerosol-driven cloud cover effect over high-latitude ocean	ZHU Yannian Nanjing University, China
11:30-11:50	S5-2-3: Spatial contrast in abundance and mixing state of black carbon particles in Arctic marine air	<b>TENG Xiaomi</b> Zhejiang University, China
12:10-13:30	Lunch (Xinghuyuan Restaura	nt)

Session 5-3: The cryosphere and global change Session Chair: HWANG Cheinway			
13:40-14:05	Invited S5-3-1: The application of PANDA Meteorological Network	DING Minghu  Chinese Academy of Meteorological Sciences, China	
14:05-14:25	S5-3-2: UAV and remote sensing based monitoring of cryospheric hazards in the Pamir, Tajikistan	Mustafo Safarov  Research Center for Ecology and Environment of Central Asia, Tajikistan	
14:25-14:45	S5-3-3: Mapping abrupt permafrost thaw at a pan-Arctic scale from multi-source remote sensing data using Al foundation models	HUANG Lingcao  The Chinese University of Hong Kong, China	
14:45-15:05	S5-3-4: Research progress and trends in cryospheric human geography	QIN Yue  Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences, China	
15:05-15:25	S5-3-5: Estimation and changes of long-time global solar radiation at China's Antarctic Zhongshan Station and Great Wall Station	ZENG Zhaoliang Chinese Academy of Meteorological Sciences, China	
	Coffee break (Room 211)		
15:30-15:50	Coffee break (Room 211)		
	e cryosphere and global change		
Session 5-4: The	e cryosphere and global change	HWANG Cheinway Taiwan Chiao Tung University, China	
Session 5-4: The Session Chair: E	e cryosphere and global change DING Minghu Invited S5-4-1: Monitoring surface deformations using radar	Taiwan Chiao Tung University,	
Session 5-4: The Session Chair: E	e cryosphere and global change DING Minghu  Invited S5-4-1: Monitoring surface deformations using radar altimetry and InSAR across various polar terrains  S5-4-2: Towards sustainable Arctic governance:	Taiwan Chiao Tung University, China  ZHAO Long Shanghai Institutes for	
Session 5-4: The Session Chair: E	Invited S5-4-1: Monitoring surface deformations using radar altimetry and InSAR across various polar terrains  S5-4-2: Towards sustainable Arctic governance: enhancing adaptability and synergy  S5-4-3: Elevation-dependent climate dynamics and	Taiwan Chiao Tung University, China  ZHAO Long Shanghai Institutes for International Studies, China  Abhishek Banerjee Department of Forest,	

### **Notice**

- · Please transfer your PPT file to the computer of the meeting room in advance before your presentation. (请将您的口头报告 PPT 文件提前传递至会场计算机。)
- Please keep quiet and set your mobile phone to "mute" mode when you are listening to the presentations in the meeting room. (会场请保持安静,并将您的手机设置为"静音"状态。)
- Please gather at the lobby of the Junyi Dynasty Hotel at 8:10 a.m. and follow the volunteers to the meeting venue, or go to the meeting venue by yourself.

  (请于早上 8:10 在君宜王朝大饭店大堂集合,跟随志愿者指引前往会场,或自行前往会场。)

#### **VENUE MAP**

