





The 30th Anniversary of the Founding of CPGIS

GISCIENCES FOR COORDINATED URBAN-RURAL DEVELOPMENT

微信公众号: CPGIS

大会官网: www.cpgis.org

大会网站: http://www.cpgis2022.com/ 会议时间: 2022年8月16日-18日

会议地址:北京市海淀区学院路 29 号北京地大国际会议中心

会议赞助:北京数字绿土科技股份有限公司

会议形式:线上+线下交流 会议直播:支持 Blibli 观看直播

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The 29th International Conference on Geolnformatics in 2022 and the 30th Anniversary of the Founding of CPGIS

GISCIENCES FOR COORDINATED URBAN-RURAL DEVELOPMENT

信息科技或珍贵的同发展

CONFERENCE GUIDE

Conference Language: English is the presenting language of the conference.

August 15-18, 2022 | Beijing, China 2022 年 8 月 15—18 日 中国·北京



Organizers: The International Association of Chinese Professionals in Geographic Information Sciences (CPGIS)

China University of Geosciences, Beijing

Local Organizers: School of Information Engineering, China University of Geosciences (Beijing)

Key Scientific Research Base of State Administration of Cultural Heritage at Tsinghua University

Co-Organizers: Resources Big Data Branch, China Society of Natural Resources

Cartography Working Committee of The China Association for Geospatial Information Society

Working committee on Big Data and Artificial Intelligence of Chinese Society for Geodesy Photogrammetry and Cartography

Key Laboratory of Poyang Lake Wetland and Watershed Research, Ministry of Education, Jiangxi Normal University

Key Laboratory of Virtual Geographic Environment, Ministry of Education, Nanjing Normal University

Key Laboratory of Geographic Information Science, Ministry of Education, East China Normal University

State Key Laboratory Of Resource And Environmental Information Systems, Institute Of Geographic Sciences And Natural Resources Research, CAS

State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University

State Key Laboratory of Remote Sensing Science, Aerospace Information Research Institute, CAS and Beijing Normal University









Pretace 前言	0
The basic information 大会基本信息	0:
Participant notes 参会须知	0
Organization 组织架构	0
Keynote Speakers 主讲嘉宾	1
Program Overview 大会日程一览表	1
Program Summary 分会场议程总览	1
Schedule of Sessions 分会场报告安排	24
Conference Room Layout 会议室布局平面图	4
Transportation Guide 交通指南	48





前言 Preface



中国地质大学(北京)(China University of Geosciences,Beijing),位于北京市,是中华人 民共和国教育部直属并与自然资源部共建的全国重点大学;是国家首批"211工程"和"985工程 优势学科创新平台"重点建设高校、"双一流"建设高校;入选卓越工程师教育培养计划、"111计划"、 中国政府奖学金来华留学生接收院校、国家建设高水平大学公派研究生项目、新工科研究与实践项目; 是北京高科大学联盟成员高校;中国高校行星科学联盟签约成员;是中国地球科学高层次人才培养 的摇篮和地学研究的基地;是一所以地质、资源、环境为主要特色的研究型大学。

学校的前身是 1952 年院系调整时期由北京大学、清华大学、天津大学和唐山铁道学院等院校的 地质系(科)合并组建的北京地质学院。1975年,迁址武汉,暂时更名为为武汉地质学院。1978年, 在原北京校址设立北京研究生部。1987年,更名为中国地质大学,总部设在武汉。2005年3月, 大学总部撤销,武汉、北京两地独立办学。

GeoInformatics 2022 (the 29th CPGIS Annual Conference and the 30th Anniversary of the Founding of CPGIS) will be held on Augusts 15-18, 2022 at the China University of Geosciences (Beijing), Beijing, China. The theme of this year's conference is "GISciences for Coordinated Urban-Rural Development" . Addressing the challenges and opportunities of coordinated Urban-Rural high-quality development we face in recent years, Geoinformatics 2022 particularly encourages topics related to how geographic information sciences and technologies respond to Urban-Rural development. Besides, presentations regarding cutting-edge research on or related to broadlydefined geographic information sciences, technologies, and applications are also included in this conference.

The GeoInformatics Conference series was initiated by the International Association of Chinese Professionals in Geographic Information Sciences (CPGIS) in 1992 and has held twenty-eight annual international conferences on geographic informatics all over the world. This international conference series has provided a unique forum for exchanging novel ideas and cuttingedge knowledge on geographic information sciences and technologies among GIScience professionals worldwide.









Name

• The 29th International Conference on Geoinformatics in 2022 and the 30th Anniversary of the Founding of CPGIS

Time

• August 16-18, 2022

Address

Geosciences International Conference Centre, Beijing, China.

Orranizers

- The International Association of Chinese Professionals in Geographic Information Sciences (CPGIS)
- China University of Geosciences, Beijing

Local Organizers

- School of Information Engineering, China University of Geosciences (Beijing)
- Key Scientific Research Base of State Administration of Cultural Heritage at Tsinghua University

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- Key Laboratory of Poyang Lake Wetland and Watershed Research, Ministry of Education, Jiangxi Normal University
- Key Laboratory of Virtual Geographic Environment, Ministry of Education, Nanjing Normal University
- Key Laboratory of Geographic Information Science, Ministry of Education, East China Normal University
- State Key Laboratory Of Resource And Environmental Information Systems, Institute Of Geographic Sciences And Natural Resources Research, CAS
- State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, **Wuhan University**
- State Key Laboratory of Remote Sensing Science, Aerospace Information Research Institute, CAS and Beijing Normal University
- Institute of Remote Sensing & Geographical Information Systems, Peking University

Conference sponsor

Beijing GreenValley Technology Co., Ltd

■注册报到

时间

2022年8月15日 10:00-17:00

■地点

签到处

中国地质大学国际会议中心南楼

■重要活动

2022 年第二十九届国际地理信息学大会开幕式

时间: 2022年8月16日 08:30-10:00 地点:地质大学国际会议中心南楼报告厅

CPGIS 成立 30 周年年会

时间: 2022年8月16日 18:00-21:00 地点:地质大学国际会议中心北楼新时代宴会厅

■ 会务组联系人

zcx@cugb.edu.cn 15001257804 龙腾 18810955906

■会议用餐

8月16日

午餐 12:05-13:10 晚餐 17:30-19:00

自助餐

■注意事项

会议期间,请参会代表务必佩戴胸卡出入会场; 会议期间严禁以拍摄、拍照、录音、拷贝等方式记录会议 演讲幻灯片、视频演示或展示图片; 请自觉将饮料、餐盒投入垃圾箱内,保持会场整洁

会议期间请将手机置于静音或震动状态,保持会场安静 会议期间请保管好自己的财物,注意安全。











防疫要求:

参会人员严格遵守国家和各地区疫 情防控要求,来自中高风险地区人 员,有外境出行史人员和确诊病例 密切接触者请勿参会,进出会场需 全程佩戴口罩,保持社交距离。



温馨提示:周边部分核酸检测点地址及检测时间(按需携带身份证件有序前往,请全程佩戴口罩)



学院路街道常态化核酸检测点

海淀区展春园西路 2号 营业时间 09:00-11:30 13:30-17:00

卡尤迪学院路邮局核酸检测点

海淀区成府路 17 号 (学院路邮政支局) 营业时间 09:00-12:00 13:00-17:00

基石医学核酸检测点

海淀区王庄公园内 营业时间 08:00-12:00 13:00-18:00

北京索真医学检验实验室核酸检测点 海淀区中关村东路 8 号东升大厦附近

营业时间 08:00-18:00

中国石油化工科学研究院西门核酸检测点 海淀区学院路街道政务服务中心东南侧

营业时间 09:00-12:00 13:00-18:00

北京北基医学检验实验室核酸检测点 海淀区中钢下沉广场

营业时间 09:00-12:00 13:00-15:00

谱尼医学中石油勘探开发研究院南门核酸检测点 海淀区学院路 20号

营业时间 09:00-12:00 13:00-18:00

北京大学第三医院核酸检测点

海淀区花园北路 49号 营业时间 09:00-12:00 13:00-16:00











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Speaker 1 On Replicability Over the Globe

Michael F. Goodchild(University of California Santa Barbara)

Tuesday 16 August 10:00-10:30

Member of the American Academy of Sciences

Chair of the Executive Committee of the National Center for Geographic Information & Analysis (NCGIA) at the University of California, Santa

Corresponding Fellow of the British Academy

Foreign Member of the Royal Society of Canada

Chair Professor, the Hong Kong Polytechnic University

Replicability takes on special meaning when researching phenomena that are embedded in space and time, including phenomena distributed on the surface and near-surface of the Earth. Two principles, spatial dependence and spatial heterogeneity, are generally characteristic of such phenomena. Various practices have evolved in dealing with spatial heterogeneity, including the use of place-based models. I review the rapidly emerging applications of artificial intelligence to phenomena distributed in space and time, and speculate on how the principle of spatial heterogeneity might be addressed. I introduce a concept of weak replicability and discuss possible approaches to its measurement



Speaker 2 **Advances and Prospects of Pan-spatial Intelligent System**

Chenghu Zhou (Institute of Geographic Sciences and Natural Resources Research, CAS)

Tuesday 16 August 10:30-11:30

Professor at the Institute of Geographic Sciences and Natural Resources, Chinese Academy of Sciences (CAS) Member of the Chinese Academy of Sciences

Member of the International Eurasian Academy of Sciences (IEAS)

Vice chairman of the Geographic Information Science Committee, International Geographic Union (GISc, IGU)

Vice president of The Associate on Environment Remote Sensing of China (AERSC)







Speaker 3 Fundamental Concepts and Uncertainties in the Geospatial **Analysis of Environmental Health Issues**

Mei-Po Kwan (The Chinese University of Hong Kong)

Tuesday 16 August 11:30-12:30

Professor, Geography and Resource Management, The Chinese University of Hong Kong (CUHK) Director of Institute of Space and Earth Information Science at Chinese University of Hong Kong (CUHK) Professor, The Jockey Club School of Public Health and Primary Care , Chinese University of Hong Kong Founder and Chair of International Geospatial Health Research Network (IGHRN) Former President of International Association of Chinese Professionals in Geographic Information Sciences (CPGIS)

Spatio-temporal big data, technologies and human mobility analysis are very useful for the studies of environmental health issues, including pandemic risk and behavior. In this presentation, I will use COVID-19 as an example to highlight some fundamental concepts and uncertainties for the geographic analysis of pandemic spread and control measures. This kind

of analysis needs high-resolution space-time big data of people's mobility and interactions to identify effective COVID-19 control measures. Also, it important to take into account two significant methological issues that may affect the results: the neighborhood effect averaing problem (NEAP) and the nonstationarity in the relationships between environmental factors and their health effects over space, time, and the value ranges of the environmental factors under investigation. I will emphasize that ignoring fundamental methodological issues like these can lead to misleading conclusions about health-environment relationships, which may in turn have serious health consequences or policy implications.



Speaker 4 **Deep-time Digital Earth and Co-evolution of Extreme Tectonics Events**

Qiuming Cheng (The China University of Geosciences, Beijing)

Tuesday 16 August 14:00-15:00

Professor and Director, State Key Lab of Geological Processes and Mineral Resources, China University of Geosciences (Beijing) Professor, School of Earth Sciences and Engineering, Sun Yat-sen University UNESCO Chair on Deep-time Digital Earth and Mineral Resources International Association of Mathematical Geosciences (IAMG) Distinguished Lecturer Past President, International Union of Geological Sciences (IUGS)

The rapid development and application of revolutionary digital technologies such as big data, the Internet, cloud environment and artificial intelligence have enabled geoscientists to study how the earth has evolved over time, how major geological events have occurred and changed the earth, as well as distribution of resources, energy and geological hazards that are closely related to the human life and society development. The earth big data collected using various modern technique and processed in GIS represent the current earth on human time scales, but the "longtail" data analyzed from rock samples that record the earth's geological history are often scattered in the literature as unformat texts, tables, or maps. Machine reading, machine learning, and knowledge graph techniques can play important roles in extracting and integrating these types of long-tail data to form deep-time series that characterize Earth's changes over time with the aid of proper mathematical models and methods. It demonstrates that integration of big data, mathematics, and supercomputing can provide powerful tools for deep-time digital earth research. This talk will also give a brief introduction to the Deep-time Digital Earth (DDE) Big Science Program, an initiative of the International Union of Geological Sciences in facilitating data-driven earth science development.



Speaker 5 Adapting Cartography to Emerging Applications in the Digital Society

Renzhong Guo (Shenzhen University) Tuesday 16 August

Member of Chinese Academy of Engineering Head of the Research Institute for Smart Cities, Shenzhen University Member of the International Eurasian Academy of Sciences

Cartography as a subject has been through a long history. With the advance of Information and Communication Technology (ICT) in the past decades, deep transformation is gaining momentum across two sides of map products (demand and supply), manifested by continuously updated mapping techniques, continuously enriched map types, and continuously emerging applications. These changes also bring up challenges to GIS today, especially when it becomes the imperative role as both data carriers and technology platform for many information applications. The talk will discuss the extended theoretical framework of cartography and how it adapts to the digital society.



Speaker 6 Transportation Amid Pandemics: Lessons Learned from COVID-19

Junyi Zhang (Hiroshima University) Tuesday 16 August 16:00-17:00

Foreign Member of Japanese Academy of Engineering Professor, Graduate School of Advanced Science and Engineering Members of IATBR (International Association on Travel Behaviour Research)

Based on the activities of WCTRS (World Conference on Transport Research Society) COVID-19 Task Force, this lecture investigates the relationships between pandemics and transport and evaluates impacts of COVID-19 and effects of policy responses to address them. It explores how to recover from pandemics, reveals governance for immediate policy responses and future innovations, suggests strategies for postpandemic sustainable and resilient development, shares lessons of COVID-19 policymaking across countries, and discusses how to transform transport systems for a better future. This lecture will be given based on the contents of WCTRS-Elsevier book "Transportation Amid Pandemics: Lessons Learned from COVID-19", which will be published in August 2022.





Speaker 7

How GIScience can Contribute to Disaster Resilience Analysis: The Development of the Resilience Inference Measurement (RIM) Model

Nina Lam (Louisiana State University)

Wednesday 17 August 08:30-09:15

Fellow of American Association of Geographers

Professor & Abraham Distinguished Professor, Louisiana Environmental Studies, Department of Environmental Sciences

Former President of University Consortium on Geographic Information Science (UCGIS)

Improving community resilience to natural hazards has been a key societal issue and studied widely by multiple disciplines. The threat of climate change has further pushed the issue to the forefront. However, despite the voluminous literature, we still lack consensus on a fundamental aspect of resilience analysis, which is a set of science-based, actionable resilience indicators that can be used to measure and monitor the progress of resilience across space and through time. With training in spatial data analysis and human-environmental interaction thinking, GIScience researchers can contribute to disaster resilience analysis in a substantial manner. In this keynote address, I will first summarize our team's effort in the past decade in developing the Resilience Inference Measurement (RIM) model for measuring community resilience. The RIM model overcomes two major deficiencies of most existing resilience measurement frameworks/indices - the lack of empirical validation and the lack of statistical inferential power. I will highlight how RIM has been applied to different types of hazards, including evaluating resilience after the 2008 Wenchuan Earthquake in China, and its extension to dynamic resilience analysis and simulation. Finally, I will identify future research directions to expand RIM such as the potential of using a machine-learning approach to distinguish urban and rural resilience.



Speaker 8

Global Land Cover Change Monitoring and Impact of Global **Urbanization on Climate**

Peng Gong (The University of Hong Kong)

Wednesday 17 August 09:15-10:00

Professor, Vice-President and Pro-Vice-Chancellor of The University of Hong Kong Foreign Member of Academia Europaea Member of the Earth Commission

Co-chair of the Lancet Climate Change and Health Commission

Over the past three decades, a lot of efforts have been made to map and monitor urban land changes using remotely sensed data. However, most of the studies have concentrated on a single city or a cluster of cities. It is not until recently that global mapping and monitoring of cities have come into being. In this talk I shall present a trajectory of urban mapping and change analysis and the impact of global urbanization on climate mainly based on works conducted in my research, and then discuss some possible future perspectives in monitoring the world's cities.



Speaker 9

Leaf chlorophyll content: a new remotely sensible parameter for terrestrial carbon cycle estimation

Jingming Chen (University of Toronto)

Thursday 18 August 08:30-09:15

Research Chair and Fellow of Royal Society of Canada

Professor, the Department of Geography and Planning, the University of Toronto, Canada

Director of International Institute for Earth System Science (ESSI)

Professor of Fujian Normal University

Nitrogen is an essential element of carbohydrate produced through photosynthesis. Leaf nitrogen content (LNC) is therefore traditionally a key parameter in determining leaf photosynthetic capacity. LNC consists of photosynthetic, structural, storage and respiratory nitrogen pools, and only the photosynthetic nitrogen pool participates in photosynthesis. However the photosynthetic nitrogen pool is rather difficult to detect using remote sensing techniques. Leaf chlorophyll content (LCC), composed of green pigments, strongly absorbs blue and red lights and can be reliably derived using remote sensing data. Experimental data showed that LCC is better correlated with leaf photosynthetic capacity than LNC. In recent years, we developed three methods to retrieve LCC from satellite data. Three global LCC products derived using these methods will be compared to show the feasibility of deriving this photosynthetic parameter and remaining issues.



Speaker 10

Revesting people, places, and practice of geographic information science

Paul Longley (University College of London)

Thursday 18 August 09:15-10:00

Professor of Geographic Information Science

Director of the Consumer Data Research Centre at University College London

Professor of Geographic Information Science, UCL

(seconded to ESRC Advanced Institute for Management Research Senior Fellowship, 2003-4)

Geographic Information Science is built around core organising principles and concepts that enable robust, transparent, open and scientifically reproducible generalisation (Goodchild and Longley 2021). Yet it is also a science of real world problem-solving, which must necessarily engage with changes in the nature and forms of geographic information. This in turn presumes understanding of the (post-Covid) human activity patterns that underpin emergent data infrastructures. This paper undertakes a reappraisal of some of the resultant challenges to GIScience posed by use of consumer data (Longley et al2018) and of endeavours to use geographic information to better understand the processes of place formation over temporal scales ranging from the diurnal to the dynastic.







大会日程一览表 **Program Overview**

Geoinformatics 2022 Program at a glance

BEIJIING TIME (GMT+8)	TUESDAY 08.16.2022	WEDNESDAY 08.17.2022	THURSDAY 08.18.2022
8:30 am - 10:00 am	Conference Opening and Welcome	Keynote 7: Nina Lam Keynote 8: Peng Gong	Keynote 9: Jingming Chen Keynote 10: Paul Longley
10:00am - 10:30am	Keynote 1: Michael F. Goodchild	Keynote : Deren Li	Break
10:30am - 12:30am	Keynote 2: Chenghu Zhou Keynote 3: Mei-Po Kwan	Six Parallel Sessions	Six Parallel Sessions
12:30am - 1:30pm	Lunch Break	Lunch Break	Lunch Break
1:30pm - 3:30pm	Keynote 4: Qiuming Cheng Keynote 5: Renzhong Guo	Six Parallel Sessions	Six Parallel Sessions
3:30pm - 5:30pm	Keynote 6: Junyi Zhang (2:00pm-5:00pm)	Six Parallel Sessions	Six Parallel Sessions
6:00pm - 9:00pm	CPGIS 30th Anniversary Celebration Night		8:00pm Live Q&A Session with Paul Longley (online)

* All parallel sessions will be held online

Zoom ID: 978 3682 8442 for all keynote speeches.

Live 直播链接: http://live.bilibili.com/22337290

或扫描下方二维码进入主会场直播间:



Program Info: https://www.cpgis.org/Conferences/Programx.aspx?ID=2078

Wednesday 17 August 2022, Beijing Time, Meeting Room No.1,

Tencent Meeting ID: 3462853221, Bilibili UID: 488806170

Time	Session	Chairs
10:30-12:30	Sessions 1-1: Advancement in Remote Sensing of Environment	Hongsheng Zhang, Qingling Zhang

Wednesday 17 August 2022, Beijing Time, Meeting Room No.2,

Tencent Meeting ID: 3629684502, Bilibili UID: 500166971

Time	Session	Chairs
10:30-12:30	Sessions 2: Best Student Paper Competition	Xiang Chen

Wednesday 17 August 2022, Beijing Time, Meeting Room No.3,

Tencent Meeting ID: 4513385275, Bilibili UID: 388953866

Time	Session	Chairs
10:30-12:30	Sessions 3-1: Cartography and Geovisualization	Fu Ren, Tingting Xu

Wednesday 17 August 2022, Beijing Time, Meeting Room No.4,

Tencent Meeting ID: 3917869440, Bilibili UID: 486697903

Time	Session	Chairs
10:30-12:30	Session 4-1: Big Earth Data for Disaster Risk Reduction	Lei Zou, Fang Chen, Xiao Huang, Bandana Kar

Wednesday 17 August 2022, Beijing Time, Room No.5,

Tencent Meeting ID: 7753895693, Bilibili UID: 32991931

Time	Session	Chairs
10:30-12:30	Session 5-1: Remote Sensing and GIS for Urban-Rural Sustainability	Chairs: Yingchun Fu, Yang Yue, Zhenfeng Shao

Wednesday 17 August 2022, Beijing Time, Meeting Room No.4,

Session

Session 4-2: Big Earth Data for Disaster Risk

Session 8: Virtual Geographic Environments

Session

Session 5-2: Remote Sensing and GIS for

Session 5-3: Remote Sensing and GIS for

Wednesday 17 August 2022, Beijing Time, Meeting Room No.5,

Tencent Meeting ID: 3917869440, Bilibili UID: 486697903

Tencent Meeting ID: 7753895693, Bilibili UID: 32991931

Urban-Rural Sustainability

Urban-Rural Sustainability

Reduction

Chairs: Yingchun Fu, Yang

Yue, Zhenfeng Shao

Chairs

Chairs

Lei Zou, Fang Chen, Xiao

Huang, Bandana Kar

Chunxiao Zhang, Yuting

Chen, Min Chen

Chairs: Yingchun Fu, Yang

Yue, Zhenfeng Shao

Wednesday 17 August 2022, Beijing Time, Meeting Room No.6,

Tencent Meeting ID: 7417386743, Bilibili UID: 569306496

分会场议程总览

Time

13:30-15:00

15:30-17:30

Time

13:30-15:00

15:30-17:30

Program Summary

Time	Session	Chairs
13:30-15:00	Session 6-2: Spatiotemporal Big Data for Urban Governance	Wenwu Tang, Minrui Zheng, Xiaodan Hao, Yi Zhang
15:30-17:30	Session 6-3: Spatiotemporal Big Data for Urban Governance	Wenwu Tang, Minrui Zheng, Xiaodan Hao, Yi Zhang



Wednesday 17 August 2022, Beijing Time, Meeting Room No.6,

Tencent Meeting ID: 7417386743, Bilibili UID: 569306496

Time	Session	Chairs
10:30-12:30	Session 6-1: Spatiotemporal Big Data for Urban Governance	Wenwu Tang, Minrui Zheng, Xiaodan Hao, Yi Zhang

Wednesday 17 August 2022, Beijing Time, Meeting Room No.1,

Tencent Meeting ID: 3462853221, Bilibili UID: 488806170

Time	Session	Chairs
13:30-15:00	Sessions 1-2: Advancement in Remote Sensing of Environment	Hongsheng Zhang, Qingling Zhang
15:30-17:30	Sessions 1-3: Advancement in Remote Sensing of Environment	Hongsheng Zhang, Qingling Zhang

Wednesday 17 August 2022, Beijing Time, Meeting Room No.2,

Tencent Meeting ID: 3629684502, Bilibili UID: 500166971

Time	Session	Chairs
13:30-15:00	Session 7-1 Geo-Information Technology for Cultural Heritage Conservation	Anrong Dang, Alex Yaning Yen
15:30-17:30	Session 7-2: Geo-Information Technology for Cultural Heritage Conservation	Anrong Dang, Alex Yaning Yen

Wednesday 17 August 2022, Beijing Time, Meeting Room No.3,

Tencent Meeting ID: 4513385275, Bilibili UID: 388953866

Time	Session	Chairs
13:30-15:00	Sessions 3-2: Cartography and Geovisualization	Fu Ren, Tingting Xu
15:30-17:30	Sessions 3-3: Cartography and Geovisualization	Fu Ren, Tingting Xu

Thursday 18 August 2022







Biyu Chen Kun Qin, Tao Jia

Thursday 18 August 2022, Beijing Time, Meeting Room No.1, Tencent Meeting ID: 3462853221, Bilibili UID: 488806170 Session Chairs Time Session 9-1: Climate Change and Earth Obse-Cuizhen Wang, Li Sun 10:30-12:30 rvations of Permafrost in High-Latitude China Thursday 18 August 2022, Beijing Time, Meeting Room No.2, Tencent Meeting ID: 3629684502, Bilibili UID: 500166971 Time Session Chairs Xun Shi, Peng Jia, Yuanyuan 10:30-12:30 **Session 10-1:** GIScience for Public Health Šhi Thursday 18 August 2022, Beijing Time, Meeting Room No.3, Tencent Meeting ID: 4513385275, Bilibili UID: 388953866 Session Chairs Time Session 11: Geospatial information sharing 10:30-12:30 Liping Di, Yuqi Bai and interoperability Thursday 18 August 2022, Beijing Time, Meeting Room No.4, Tencent Meeting ID: 3917869440, Bilibili UID: 486697903 Time Session Chairs Fan Zhang, Xiao Huang, 10:30-12:30 **Session 12-1:** GeoAI for Urban-Rural Sensing Xiang Ye Thursday 18 August 2022, Beijing Time, Meeting Room No.5, Tencent Meeting ID: 7753895693, Bilibili UID: 32991931 Chairs Time Session Session 13-1: GeoComputation for Social



Thursday 18 August 2022, Beijing Time, Meeting Room No.6,

Tencent Meeting ID: 7417386743, Bilibili UID: 569306496

Time	Session	Chairs
10:30-12:30	Session 14: GIS Applications in Watershed Management	Shixiong Hu, Yiming Zhang

Thursday 18 August 2022, Beijing Time, Meeting Room No.1,

Tencent Meeting ID: 3462853221, Bilibili UID: 488806170

Time	Session	Chairs
13:30-15:00	Session 9-2: Climate Change and Earth Observations of Permafrost in High-Latitude China	Cuizhen Wang, Li Sun
15:30-17:30	Session 17: Remote Sensing for Smart Agriculture	Dameng Yin, Chunyuan Diao, Qingzhi Liu, Jinyan Tian

Thursday 18 August 2022, Beijing Time, Meeting Room No.2,

Tencent Meeting ID: 3629684502, Bilibili UID: 500166971

Time	Session	Chairs
13:30-15:00	Session 10-2: GIScience for Public Health	Xun Shi, Peng Jia, Yuanyuan Shi
15:30-17:30	Session 10-3: GIScience for Public Health	Xun Shi, Peng Jia, Yuanyuan Shi

Thursday 18 August 2022, Beijing Time, Meeting Room No.3,

Tencent Meeting ID: 4513385275, Bilibili UID: 388953866

Time	Session	Chairs
13:30-15:00	Session 15-1: Geospatial Approaches for Human-Environment Interaction Process	Jun Li, Shaogang Lei
15:30-17:30	Session 15-2: Geospatial Approaches for Human-Environment Interaction Process	Jun Li, Shaogang Lei

Science

10:30-12:30

Thursday 18 August 2022







Thursday 18 August 2022, Beijing Time, Room No.4,

Tencent Meeting ID: 3917869440, Bilibili UID: 486697903

Time	Session	Chairs
13:30-15:00	Session 12-2: GeoAI for Urban-Rural Sensing	Fan Zhang, Xiao Huang, Xiang Ye

Thursday 18 August 2022, Beijing Time, Meeting Room No.5,

Tencent Meeting ID: 7753895693, Bilibili UID: 32991931

Time	Session	Chairs
13:30-15:00	Session 13-2: GeoComputation for Social Science	Biyu Chen Kun Qin, Tao Jia

Thursday 18 August 2022, Beijing Time, Meeting Room No.6,

Tencent Meeting ID: 7417386743, Bilibili UID: 569306496

Time	Session	Chairs
13:30-15:00	Session 16: Human Dynamics for Urban Data Science	Xinyue Ye, Yang Xu



Zoom ID: 978 3682 8442 for all keynote speeches. Wednesday 17 August 2022, Beijing Time

Program Info: https://www.cpgis.org/Conferences/Programx.aspx?ID=2078

Sessions 1-1 Advancement in Remote Sensing of Environment Chairs: Hongsheng Zhang, Qingling Zhang Tencent Meeting ID: 3462853221, bilibili UID: 488806170

Time	Lectures	Institutes
10:30-10:45	PyCLKDE: A big data-enabled high-performance computational framework for species habitat suitability modeling and mapping Guiming Zhang	University of Denver
10:45-11:00	Spatiotemporal Characteristics of ecosystem service value and its correlation with landscape patterns: A case of Bohai coastal wetland in Shandong Province Teng Zhang and Baolei Zhang	Shandong Normal Univer- sity
11:00-11:15	Beijing Winter Olympics Guarantee Based on Image Quality Improvement of FY-3D MERSI-II Ningyuan Zhou, Kaimin Sun, and Yumin Chen	Wuhan University
11:15-11:30	Design of Receptive Field involved lightweight Neural Network Wenqiang Liu and Guoyin Cai	Beijing University of Civil Engineering and Architec- ture
11:30-11:45	Analysis of changing geological information atlas of arable land utilization in northeast China Linhe Chen, Quanfeng Li, and Lu Wang	Northeast Agricultural University
11:45-12:00	Precise Point Positioning and Accuracy Analysis Based on MSAS Corrections Xinting Li, Lizhi Miao, and Jizhong Wu	Nanjing University of Posts and Telecommunications

Sessions 2 Best Student Paper Competition Chairs: Xiang Chen

Tencent Meeting ID: 3629684502, Bilibili UID: 500166971

Time	Lectures	Institutes
10:30-10:45	Revealing intra-urban spatial structure through an exploratory analysis by combining road network abstraction model and taxi trajectory data Sheng Hu	National University of Sin- gapore
10:45-11:00	Optimal Billboard Location Selection using Social Media Context Yang Zhong	Claremont Graduate University
11:00-11:15	Simulating Urban Energy Use Under Climate Change Scenarios and Retrofit Plans in a Coastal Texas Community Chunwu Zhu	Texas A&M University
11:15-11:30	Automatic Building Extraction based on Boundary Detection Network in Satellite Images Anni Wang	Wuhan university
11:30-11:45	Changes in crop planting structure in black soil county of Northeast China Wei Liu	Northeast Agricultural University
11:45-12:00	Counting maize tassels from field RGB image by a three-step method Yali Bai	Wuhan University



Zoom ID: 978 3682 8442 for all keynote speeches.

Wednesday 17 August 2022, Beijing Time





Sessions 3-1 Cartography and Geovisualization Chairs: Fu Ren, Tingting Xu Tencent Meeting ID: 4513385275, bilibili UID: 388953866			
Time	Lectures	Institutes	
10:30-10:45	Comprehensive urban atlas design and practice of big spatio- temporal data Jing Xin, Wen Zhang, and Xin Luo	Shanghai Surveying and Mapping Institute	
10:45-11:00	A Method for Removing Complex Visible Watermarks of Electronic Map Based on Conditional Generative Adversarial Nets Baode Jiang, Shaofen Xu, Liufeng Tao, and Zhong Xie	China University of Geosci- ences	
11:00-11:15	The 1:50,000 Eastern China map series (1926-1946) and its values for long-term land-cover and land-use change studies Baohui Chai	Fudan University	
11:15-11:30	The source of the 1 in 50,000 topographic map error in the Republic of China and the analysis of the city database Dang Ying	Fudan University	
11:30-11:45	An Improved A-LOAM 3D Mapping Method Based on Ultra- wide Field Angle of Multi-line Lidar Tianni Wang, Honggang Yang, Qingwu Hu, Xuan Wu, and Pengcheng Zhao	Wuhan university, China Railway Siyuan Survey and Design Group Co., LTD.	
Session 4-1 Big Earth Data for Disaster Risk Reduction Chairs: Lei Zou, Fang Chen, Xiao Huang, Bandana Kar Tencent Meeting ID: 3917869440, bilibili UID: 486697903			
Tencent Mo			
Tencent Mo		Institutes	
	eeting ID : 3917869440 , bilibili UID : 486697903	Institutes Shandong University of Science and Technology	
Time	Lectures A phased vehicles evacuation planning method for disasters with time-dependent traffic demand	Shandong University of	
Time 10:30-10:45	Lectures A phased vehicles evacuation planning method for disasters with time-dependent traffic demand Litao Han, Mengfan Liu, Huixia Guo, Hu Qiao, and Cheng Gong Multi-scenario Tsunami Hazard Analysis in the Lianyun District Tingting Fan, Jingming Hou, Peitao Wang, Zhiguo Xu, Lianda Zhao, and	Shandong University of Science and Technology National Tsunami Warning Center, National Marine Environmental Forecasting	
Time 10:30-10:45 10:45-11:00	Lectures A phased vehicles evacuation planning method for disasters with time-dependent traffic demand Litao Han, Mengfan Liu, Huixia Guo, Hu Qiao, and Cheng Gong Multi-scenario Tsunami Hazard Analysis in the Lianyun District Tingting Fan, Jingming Hou, Peitao Wang, Zhiguo Xu, Lianda Zhao, and Karyono Karyono Comprehensive Evaluation of Emergency Shelters in Wuhan City Based on GIS	Shandong University of Science and Technology National Tsunami Warning Center, National Marine Environmental Forecasting Center	
Time 10:30-10:45 10:45-11:00 11:00-11:15	Lectures A phased vehicles evacuation planning method for disasters with time-dependent traffic demand Litao Han, Mengfan Liu, Huixia Guo, Hu Qiao, and Cheng Gong Multi-scenario Tsunami Hazard Analysis in the Lianyun District Tingting Fan, Jingming Hou, Peitao Wang, Zhiguo Xu, Lianda Zhao, and Karyono Karyono Comprehensive Evaluation of Emergency Shelters in Wuhan City Based on GIS Tingyu Luo, Boheng Li, and Qingxiang Meng Integrating Social Media Data with Building Footprints for Rapid Disaster Damage Assessment	Shandong University of Science and Technology National Tsunami Warning Center, National Marine Environmental Forecasting Center Wuhan University	
Time 10:30-10:45 10:45-11:00 11:00-11:15 11:15-11:30	Lectures A phased vehicles evacuation planning method for disasters with time-dependent traffic demand Litao Han, Mengfan Liu, Huixia Guo, Hu Qiao, and Cheng Gong Multi-scenario Tsunami Hazard Analysis in the Lianyun District Tingting Fan, Jingming Hou, Peitao Wang, Zhiguo Xu, Lianda Zhao, and Karyono Karyono Comprehensive Evaluation of Emergency Shelters in Wuhan City Based on GIS Tingyu Luo, Boheng Li, and Qingxiang Meng Integrating Social Media Data with Building Footprints for Rapid Disaster Damage Assessment Lei Zou ST-LSTM-SA: A spatiotemporal predictive model for rainfall forecasting	Shandong University of Science and Technology National Tsunami Warning Center, National Marine Environmental Forecasting Center Wuhan University Texas A&M University National Engineering Research Center for Geographic Information System, China University of	
Time 10:30-10:45 10:45-11:00 11:00-11:15 11:15-11:30 11:30-11:45	Lectures A phased vehicles evacuation planning method for disasters with time-dependent traffic demand Litao Han, Mengfan Liu, Huixia Guo, Hu Qiao, and Cheng Gong Multi-scenario Tsunami Hazard Analysis in the Lianyun District Tingting Fan, Jingming Hou, Peitao Wang, Zhiguo Xu, Lianda Zhao, and Karyono Karyono Comprehensive Evaluation of Emergency Shelters in Wuhan City Based on GIS Tingyu Luo, Boheng Li, and Qingxiang Meng Integrating Social Media Data with Building Footprints for Rapid Disaster Damage Assessment Lei Zou ST-LSTM-SA: A spatiotemporal predictive model for rainfall forecasting Jie Liu, Lei Xu, and Nengcheng Chen Landslide Detection Methods Based on Deep Learning in Remote Sensing Images	Shandong University of Science and Technology National Tsunami Warning Center, National Marine Environmental Forecasting Center Wuhan University Texas A&M University National Engineering Research Center for Geographic Information System, China University of Geosciences (Wuhan) Chengdu University of	





Sessions 5-1 Remote Sensing and GIS for Urban-Rural Sustainability

Chairs: Yingchun Fu, Yang Yue, Zhenfeng Shao Tencent Meeting ID: 7753895693, bilibili UID: 32991931		
Time	Lectures	Institutes
10:30-10:45	Reconsideration on Ghost Cities From a Human-Land-Relationship Perspective Xiuyuan Zhang and Shihong Du	Peking University
10:45-11:00	Dynamic Change of Urban-Rural Income Inequality and Construction Land Area Gap based on VAR Model Tianyu Zhou, Peng Gou, Haimeng Liu, Nuo Xu, Wei Nie, and Yang Liu	Nanhu Laboratory
11:00-11:15	Spatiotemporal Evolution of Habitat Quality Based on Ecological Red Line - A Case of Shiyan-Shenanongjia Ting Xiang, Xiaoliang Meng, Jing Xiong, Xinshuang Wang, and Yuan Zhang	Wuhan University
11:15-11:30	A comparison of two models to measure the distance decay of urban land density to the city center Jieru Zheng, Ting Dong, Gang Xu, and Qingxiang Meng	Wuhan University
11:30-11:45	The use of Siamese multi-task neural network for building change detection from VHR remote sensing images Xuanguang Liu, Mengmeng Li, and Xiaoqin Wang	Fuzhou University
11:45-12:00	Understanding the coupling and coordination relationship between urbanization and eco-environment in the Yangtze River Economic Belt Longyang Huang, Ting Xiang, and Yangge Tian	Wuhan University
Session 6-1 Spatiotemporal Big Data for Urban Governance Chairs: Wenwu Tang, Minrui Zheng, Xiaodan Hao, Yi Zhang Tencent Meeting ID: 7417386743, bilibili UID: 569306496		
Time	Lectures	Institutes
10:30-10:45	Long-term Evolution Recognition and Management Level Evaluation of Pavement Performance Based on Clustering Analysis Minhua Shao, Yiwen Sun, and Xiumeng Yun	Tongji University

Time	Lectures	Institutes
10:30-10:45	Long-term Evolution Recognition and Management Level Evaluation of Pavement Performance Based on Clustering Analysis Minhua Shao, Yiwen Sun, and Xiumeng Yun	Tongji University
10:45-11:00	Exploring time spatial dependence in crime open data using time constrained geographically weighted co-location quotient analysis Ling Li	Nanning Normal University
11:00-11:15	Evolution of urban built-up areas and its impact on urban vegetation of Jinan City, Eastern China Meirui Li, Bing Hu, and Baolei Zhang	Shandong Normal Univer- sity
11:15-11:30	Spatial connection pattern of urban network based on mobile signaling data in China Minmin Li, Chengyue Zhang, Xiaoming Li, Biao He, and Renzhong Guo	Shenzhen University
11:30-11:45	Exploration of data-driven integration evaluation method of industry and city Xianming Kong and Yangge Tian	Wuhan University
11:45-12:00	Identifying urban land-use change patterns by integrating multi-period point-of-interest and deep graph neural network Yao Yao and Qia Zhu	China University of Geosci- ences, Wuhan





Zoom ID: 978 3682 8442 for all keynote speeches. Wednesday 17 August 2022, Beijing Time

分会场报告安排 **Schedule of Sessions**



Tencent M	Tencent Meeting ID: 3462853221, bilibili UID: 488806170		
Time	Lectures	Institutes	
13:30-13:45	Glacier remote sensing information extraction based on deep learning Yanni Ma	China Aero Geophysical Survey and Remote Sens- ing Center for Natural Resources	
13:45-14:00	Research on the extraction method of impervious surface in Nanjing based on random forest classification Ying Xu, Chang Jiang, Xian L. Li, En Z. Ji, and Si Q. Ban	Nanjing University of Posts and Telecommunications	
14:00-14:15	Estimating Forest Aboveground Biomass in the Brazilian Amazon Using Airborne LiDAR and Ground Inventory Data Qian Zhang	Lanzhou Jiaotong Univer- sity	
14:15-14:30	Analysis of Spatial Multi-scale Land Use Structure Evolution Based on Information Entropy and Fractal Dimension Chen Guo-Ping, Zhao Jun-San, Lin Yi-Lin, Cheng Jia-Qi, and Wu Xiaowei	Kunming University of Science and Technology, Yunnan Surveying and Mapping Institute Co., Ltd.	
14:30-14:45	Analysis on Spatio-temporal Evolution and influencing factors of Heat Island effect in Jinan Qian Wang and Bao-Lei Zhang	Shandong Normal Univer- sity	
Tea break			
15:30-15:45	Water Transparency Inversion Method of Dongting Lake based on Feedforward Neural Network Learning Hu Shirui, Liu Xiuguo, and Hu Qingwu	China University of Geosci- ences, Wuhan University	
15:45-16:00	Temporal and spatial characteristics of drought in the Tropic of Cancer (Yunnan Section) based on TRMM and MODIS data Yanke Zhang, Jinliang Wang, and Feng Cheng	Yunnan Normal University	
16:00-16:15	Overseas Mapping and Accuracy Evaluation Based on ZY-3 Satellite Imagery Yang Zhongxiang, Song Youbin, Qiao Zhongcheng, Chen Guanrong, and An Jianying	Yunnan College of Tourism Vocation, Yunnan Institute of Surveying and Mapping Engineering	
16:15-16:30	Burned Area Mapping Algorithm Based on Coarse-Resolution Satellites Shuhan Lou, Yuanhong Liao, and Yuqi Bai	Tsinghua University	
16:30-17:00	Studies on estimation model of carbon storage and its prediction of temporal dynamics of major forest types in the southern slope of the middle Qinling Mountains, China Wanlong Sun and Xuehua Liu	Tsinghua University	
17:00-17:15	Reservoir Dam Surface Deformation Monitoring Based on SBAS-InSAR Technology Wei Jiang, Zhengjia Zhang, Zhiguo Pang, Qingguang Jin, Juan Lv, and Pengjie Zhang	China Institute of Water Resources and Hydropower Research, China University of Geosciences	



Zoom ID: 978 3682 8442 for all keynote speeches. Wednesday 17 August 2022, Beijing Time

Sessions 7-1, 7-2 Geo-Information Technology for Cultural Heritage Conservation Chairs: Anrong Dang, Alex Yaning Yen Tencent Meeting ID: 3629684502, bilibili UID: 500166971

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Time	Lectures	Institutes
13:30-13:45	An Innovative Digitalization Approach to the Intervention Process Management in the Great Wall Conservation and Maintenance Project Jianwei Zhang	School of Archaeology and Museology, Peking University
13:50-14:05	UAS Surveys for the Great Wall – from an Architect's Perspective Zhi Zhang , Anrong Dang	School of Architecture, Tsinghua University
14:05-14:25	The digitization of ancient buildings in the Forbidden City in the 3.0 era Xiaochong Cheng	The Palace Museum
14:25-14:40	Combination of lidar technology and Fa-shi calculation method of Chinese ancient architecture heritage reconstruction Chenyang Wang	Development Research Center for Surveying & Mapping, Ministry of Natural Resources
14:40-15:00	Development of an online spectral libary for pigments of painting Miaole Hou , Shuqiang Lv	Beijing University of Civil Engineering of Architecture
Tea break (15:	00-15:30)	
15:30-15:50	Spatial Historical Big Data for Urban and Cultural Land- scape Heritages Jie He	School of Architecture, Harbin Institute of Technology, Shen- zhen
15:50-16:05	A Historical geographic database using Multi-level Grid: a case study of Shanghai Shuang Li	Center for Historical Geogra- phy, Fudan University
16:05-16:25	Digital Empowerment for Disaster Risk Management of Cultural Heritage based on the 5Cs strategy Alex Yaning Yen	China University of Technol- ogy at Taipei
16:25-16:45	Disasters Monitoring and Early Warning in Tibetan Villages of World Natural Heritage Site-Jiuzhaigou Valley Hongtao Liu , Shanshan Zhu, Miran He	World Heritage Research Center, Southwest Jiaotong University
16:45-17:00	A study on the distribution of 5A attractions and the spatio-temporal characteristics of tourists' emotions in China Jingbo Wang, Yuting Wu, and Yu Xia	School of Geography and Environment , Jiangxi Normal University
17:00-17:15	Tourists' visual preference and planning response based on multi-agent model: a case study of Kulangsu Yuan Li , Jingxiong Huang	School of Architecture and Civil Engineering, Xiamen University
17:15-17:35	The Transformational Impacts of Information Technology: International Trends and Chinese Practices in the Digital Conservation of World Heritage Chen Yang	College of Architecture and Urban Planning, Tongji Uni- versity

分会场报告安排

Schedule of Sessions





Zoom ID: 978 3682 8442 for all keynote speeches. Wednesday 17 August 2022, Beijing Time

分会场报告安排 Schedule of Sessions

		for all keynote speeches. 2022, Beijing Time
Chairs: Fu F	Ren, Tingting Xu	ohy and Geovisualizat 885275, bilibili UID:
Time		Lectures
Research on Coloring of 3D Point Cloud and 13:30-13:45 Based on Handheld SLAM		

Chairs: Fu Ren, Tingting Xu Tencent Meeting ID: 4513385275, bilibili UID: 388953866		
Time	Lectures	Institutes
13:30-13:45	Research on Coloring of 3D Point Cloud and Panoramic Image Based on Handheld SLAM Shaocong Li, Qingwu Hu, and Pengcheng Zhao	Wuhan University
13:45-14:00	Continue to promote the transformation and upgrading of China 's fundamental surveying and mapping Chenyang Wang	Development Research Center for Surveying & Mapping, Ministry of Natural Resources, Beijing, China
14:00-14:15	Integrating Characteristics of Vertical Viewing Angle into Quantitative Analysis of Street View Photos Ziyu Tong and Chuanjia Gong	Nanjing University
14:15-14:30	Comparisons of five indices for estimating local terrain surface roughness using LiDAR point clouds Lei Fan	Xi' an Jiaotong-Liverpool University
14:30-14:45	An improved iterative local search algorithm for the regional- ization problem Yunfeng Kong	Henan University
15:30-15:45	THE POSTMODERNITY OF WEMAP Wang Haiying, Yan Haowen, Tian Jiangpeng, and Liang Xiaohe	Lanzhou Jiaotong Univer- sity, Information Engineer- ing University, Lanzhou Research Institute of Sur- veying and Mapping
15:45-16:00	Multi-generalization Operators Jointly deal with High-density Block Spatial conflict Wende Li	Lanzhou Jiaotong Univer- sity
16:00-16:15	Visually Exploring the Evolutions of Carbon Emissions in China from a Multi-temporal scale Perspective: A Case Study on the Province-level CO2 Emissions Pengdong Zhang	Nanjing University of Posts and Telecommunications
16:15-16:30	WQDC: A Modified Dorling Cartogram for Visualizing Water Quality of Rivers Mengke Zhang and Lina Huang	Tsinghua University
16:30-17:00	The Influence of AR Scene Complexity on Map Reading Tasks: A User Study using Eye-Tracking approach Liuduozi Yang and Lina Huang Wanlong Sun and Xuehua Liu	Wuhan University
17:00-17:15	Deep Net-based Transfer Learning for Volunteered Map Text Detection Xiran Zhou, Kaiyuan Li, Yanrui Zhai, Zhigang Yan, Yong Xue, and Kai Qin	China University of Mining and Technology

Session 4-2 Big Earth Data for Disaster Risk Reduction Chairs: Lei Zou, Fang Chen, Xiao Huang, Bandana Kar Tencent Meeting ID: 3917869440, bilibili UID: 486697903		
Time	Lectures	Institutes
13:30-13:45	Integration and application of spatial information model for earthquake damage assessment based on cloud architecture in Yunnan Yanbo Cao	Yunnan Earthquake Agency
13:45-14:00	Retrieving recent-decade ground deformation time-series of Chongming Island in Shanghai with multi-platform MT-InSAR analysis Chengfang Yao and Qing Zhao	East China Normal Univer- sity
14:00-14:15	Bibliometric research on the evolution of resilience theme from the perspective of Geographical Science Yang Yang, Lili Wang, and Hongchi Zhang	Dalian University of Tech- nology
14:15-14:30	Changing properties in 3D spatiotemporally contiguous heatwaves over China Ming Luo and Wu Sijia	Sun Yat-Sen University
14:30-14:45	A Hybrid Feature Selection Approach for Flash Flood Disaster Risk in Jiangxi Province, China Lulu Yang, Xiuqin Fang, Yu Cao, Liliang Ren, and Xiaoxiang Zhang	Hohai University
14:40-15:00	Study on the Spatio-temporal Distribution of China's High- Resolution Grid Consumption Carbon Footprint Xu Feng and Zheng Xinqi	China University of Geosciences(Beijing)
Chairs: Chu	Virtual Geographic Environments nxiao Zhang, Yuting Chen, Min Chen eeting ID : 3917869440, bilibili UID : 486697903	
Time	Lectures	Institutes
15:30-15:45	Optimized Design Method for Satellite Constellation Configuration Based on Real-time Coverage Area Evaluation Jiahao Zhou, Boheng Li, and Qingxiang Meng	Wuhan University
15:45-16:00	Domain-knowledge-based intelligent geographical modeling Cheng-Zhi Qin and A-Xing Zhu	Institute of Geographic Sci- ences & Natural Resources Research, Chinese Acad- emy of Sciences
16:00-16:15	REAL-TIME DENSE 3D MAPPING USING PORTABLE LIDAR AND CAMERA Yang Zhiyuan, Li Jing, and Shi Chenhui	Aerospace Information Research Institute, Chinese Academy of Sciences
16:15-16:30	Optimization modeling method of disaster virtual geographic environment by knowledge guided Lin Fu and Jun Zhu	Southwest Jiaotong University
16:30-16:45	Three-dimensional virtual representation for the whole process of dam-break floods from a geospatial storytelling perspective Weilian Li and Jun Zhu	University of Bonn

16:15-16:30

16:30-16:45

Wednesday 17 August 2022





Zoom ID: 978 3682 8442 for all keynote speeches. Wednesday 17 August 2022, Beijing Time



Institute of Forest Resource

Information Techniques,

Chinese Academy of For-

estry

Jiangxi Normal University



Forest landscape pattern analysis under urbanization in the

Research on the Spatial and Temporal Evolution of Nanfeng

Guangdong-Hong Kong-Macao Greater Bay Area

Zhiwen Yuan, Shili Meng, and Yong Pang

Spatial Form Based on Spatial Syntax

Yulin Wang and Hui Lin



Zoom ID: 978 3682 8442 for all keynote speeches. Wednesday 17 August 2022, Beijing Time

Sessions 6-2, 6-3 Spatiotemporal Big Data for Urban Governance Chairs: Wenwu Tang, Minrui Zheng, Xiaodan Hao, Yi Zhang Tencent Meeting ID: 7417386743, bilibili UID: 569306496

Time	Lectures	Institutes
13:30-13:45	Deep learning prediction of the location of missing persons in China based on NGO data Yao Yao and Anning Dong	China University of Geosci- ences, Wuhan
13:45-14:00	From cloud-native GIS to GI-native: A blueprint for future spatio-temporal infrastructure Anran Yang and Ning Jing	National University of De- fense Technology
14:00-14:15	Spatial pattern and factors analysis of farmland in Maonan district Yihan Zhang, Guanyi Li, Wenlin Chen, Zhengkeng Li, Dan Li, and Yanling Sheng	Guangdong University of Finance and Economics
14:15-14:30	Analysis of the evolution of the landscape pattern of non- construction land in downtown chengdu and its driving forc- es Manlin Wang, Xiaoliang Wang, Yuan Zhou, Zhenhua Pan, Jianpeng Cao, and Xianmin Mai	Southwest Minzu Univer- sity
14:30-14:45	Identifying the collaborative scheduling areas of ride-hailing and traditional taxi services based on trajectory data Wei Yao, Zhiyuan Zhao, Pengzhou Wang, Sheng Wu, Qunyong Wu, Lina Fang, and Zhixiang Fang	Academy of Digital China (Fujian), Fuzhou University
ea break		
15:30-15:45	When Mass Appraisal Model of Real Estate Meets Geospatial Artificial Intelligence (GeoAI): for Better or Worse? Daikun Wang and Victor Jing Li	The Chinese University of Hong Kong
15:45-16:00	sustainable smart city evaluation of 35 key cities in China Jingjing Liu and Lei Xu	Nanjing University of Post and Telecommunications
16:00-16:15	Prediction of air quality in Nanjing Based on Recurrent Neural Network Siqin Ban, Benyi Wei, Wenhai Xie, Ying Xu, and Chang Jiang	Nanjing University of Posts and Telecommunications
16:15-16:30	Technical Connotation and Research Agenda of Natural Resources Spatio-temporal Information Zhang Chengcheng and Gui Dezhu	Chinese Academy of Sur- veying & Mapping
16:30-16:45	Analysis on Influencing Factors of urban comprehensive carrying capacity: a case study of five provinces in Northwest China Chuqiao Han, Jianghua Zheng, Binbin Lu, and Danlin Yu	XinJiang Univeristy
16:45-17:00	Agent-based Modelling on Intra-urban Activities using Taxi Trajectory Data Shuhui Gong, Xiangrui Dong, Kaiqi Wang, Bingli Lei, Zizhao Jia, Yilin Li, and Miran Lu	China University of Geoscience (Beijing)



Zoom ID: 978 3682 8442 for all keynote speeches. Thursday 18 August 2022, Beijing Time



Sessions 9-1 Climate Change and Earth Observations of Permafrost in High-Latitude China

Chairs: Cuizhen Wang Tencent Meeting ID: 3462853221, bilibili UID: 488806170

Tin	ne	Lectures	Institutes
10:30-:	10:45	Gap-Filling of 8-Day Terra MODIS Daytime Land Surface Temperature in High-Latitude Cold Region with Generalized Additive Models (GAM) Dianfan Guo, Cuizhen Wang, and Shuying Zang	Harbin Normal University, University of South Caro- lina
10:45-:	11:00	Refining the Southern Boundary of Permafrost in Boreal Mountain Forest, Northeast China Cuizhen Wang and Dianfan Guo	University of South Caro- lina, Harbin Normal Uni- versity
11:00-	11:15	Seasonal freeze-thaw processes of soils in the active layer in Xing' an permafrost regions and their influencing factors Shuying Zang, Boquan Lu, and Liquan Song	Harbin Normal University
11:15-	11:30	Environmental influences of humus layer thickness and permafrost continuity in Northern High Latitudes Haoran Man, Xing Feng Dong, Cuizhen Wang, and Shuiying Zang	Harbin Normal University
11:30-:	11:45	Effects of forest fires on the permafrost environment in northern Da Xing' anling Mountains, NE China Xiaoying Li and Huijun Jin	Northeast Forestry University



Zoom ID: 978 3682 8442 for all keynote speeches. Thursday 18 August 2022, Beijing Time

essions 10-1 GIScience for Public Health
hairs: Xun Shi, Peng Jia, Yuanyuan Shi
encent Meeting ID: 3629684502, bilibili UID: 500166971

Time	Lectures	Institutes
10:30-10:45	Spatiotemporal analysis on Lyme disease and landscape frag- mentation in New Hampshire Meifang Li, Xun Shi, Dorothy Wallace, and Jonathon Winter	Dartmouth College
10:45-11:00	EEvolving Effects of Non-Pharmaceutical Interventions (NPIs) on Covid-19 Health Impacts in the United States Binbin Lin, Lei Zou, Bing Zhou, and Mingzheng Yang	Texas A&M University
11:00-11:15	Place connectivity moderates the association between concentrated disadvantage and confirmed COVID-19 cases in the contiguous US Fengrui Jing, Zhenlong Li, Shan Qiao, Jiajia Zhang, Bankole Olatosi, and Xiaoming Li	University of South Caro- lina
11:15-11:30	Importance of Exposure Timing: Identifying Critical Windows of Maternal Air Pollution Exposures for Low Birth Weight in Offspring Xi Gong and Franklin Benjamin Zhan	University of New Mexico
11:30-11:45	Spatial-temporal Optimization for Automated External Defibrillator Placement Jielu Zhang, Lan Mu, Donglan Zhang, Janani Thapa, Zhuo Chen, José Pagán, Yan Li, Heejung Son, and Junxiu Liu	University of Georgia
11:45-12:00	IImpact of COVID-19 Pandemic on Housing Price in U.S. Xinba Li and Chuanrong Zhang	University of Connecticut
12:00-12:15	Targeting the spatial context of risk factors associated with heat-related mortality via multiscale geographically weighted regression. Jinglu Song, Hanchen Yu, and Yi Lu	Xi' an Jiaotong-Liverpool University
12:15-12:30	Fairness Evaluation of Health Service Facilities Based on Accessibility: A Case Study of the Metropolitan Area of Jinan City Luoan Yang, Mingjun Jiang, and Baolei Zhang	Shandong Normal Univer- sity





分会场报告安排 **Schedule of Sessions**

Zoom ID: 978 3682 8442 for all keynote speeches.

Thursday 18 August 2022, Beijing Time

Session 11 Geospatial information sharing and interoperability Chairs: Liping Di, Yuqi Bai Tencent Meeting ID: 4513385275. bilibili UID: 388953866

Tencent Meeting ID: 4513385275, bilibili UID: 388953866		
Time	Lectures	Institutes
10:30-10:45	Introducing the geospatial Python package for interactive mapping and data visualization Qiusheng Wu	University of Tennessee, Knoxville
10:45-11:00	CATS: Conditional Adversarial Trajectory Simulation for Privacy-Preserved Location Data Publication Jinmeng Rao, Song Gao, Sijia Zhu, and Yichen Xin	University of Wisconsin- Madison
11:00-11:15	IB-CBBs:An Improved Spatial Index Considering Intersection Based on Clipped Bounding Boxes Wei Xiong, Jingzhi Cao, Zebang Liu, and Ruiqing Li	National University of De- fense Technology
11:15-11:30	Research and practice of natural resources monitoring and linkage updating technology: A case study of Shanghai Wen Zhang, Jing Xin, and Yao Lu	Shanghai Surveying and Mapping Institute
11:30-11:45	Research and Practice on the Whole Process Management and Sharing Technology System of Multi-source Heteroge- neous Spatio-temporal Data Fangfang Li, Wenhua Guo, Yulong Wu, Jingbo Zhang, Rongyu Xian, and Yuan Song	Information Center of the Ministry of Natural Re- sources of the people's republic of China
11:45-12:00	Browsing Interest Extraction for the Domain Users on Public Map Service Platforms Guangsheng Dong, Rui Li, Huayi Wu, Wei Huang, and Hongping Zhang	Wuhan University
12:00-12:15	History, Current Situation and Future Challenges of China's Geographic Information Data Governance Chao Xue, Yue Zhang, and Dan Jia	Development Research Center for Surveying and Mapping, MNR



Zoom ID: 978 3682 8442 for all keynote speeches. Thursday 18 August 2022, Beijing Time

Session 12-1 GeoAI for Urban-Rural Sensing Chairs: Fan Zhang, Xiao Huang, Xiang Ye Tencent Meeting ID: 3917869440, bilibili UID: 486697903

Time	Lectures	Institutes
10:30-10:45	Large-scale Population Distribution Modeling using Building Footprints and Deep Learning Techniques Xiao Huang	University of Arkansas
10:45-11:00	UAV Image Geo-localization by Point-Line-Patch Feature Matching and ICLK Optimization Yingxiao Xu, Songbing Wu, Chun Du, Jun Li, and Ning Jing	National University of De- fense Technology
11:00-11:15	A new multi-branch learning architecture integrating semantic and change representation for semantic change detection Guodong Chen, Chenxiao Zhang, Yumin Chen, and Dianxin Li	Wuhan University
11:15-11:30	Attention Guided Graph Convolutional Networks for Point Cloud Semantic Segmentation Xinglin Shen and Youjian Hu	China University of Geosci- ences (Wuhan)
11:30-11:45	Comparison and evaluation of machine-learning-based spatial downscaling approaches for creating high-resolution precipitation data Honglin Zhu and Qiming Zhou	Hong Kong Baptist Univer- sity
11:45-12:00	Dynamic Simulation and Evolution of Land Mixed Utilization in Kunming Based on Mixed-Cell-CA Model Yilin Lin, Junsan Zhao, Guoping Chen, and Yixiang Feng	Kunming University of Sci- ence and Technology

Session 13-1 GeoComputation for Social Science Chairs: Bi Yu Chen, Kun Qin, Tao Jia

Tencent Meeting ID: 7753895693, bilibili UID: 32991931

Time	Lectures	Institutes
10:30-10:45	Sidewalk extraction based on street view images Huan Ning, Zhenlong Li, Cuizhen Wang, Michael Hodgson, Xiao Huang, and Xiaoming Li	University of South Caro- lina, University of Arkansas
10:45-11:00	Property Crime Specialization in Detroit, Michigan Yanqing Xu, Shanhe Jiang, and Marcus Felson	Wuhan University
11:00-11:15	Influence of trees' canopy occupation on pedestrian thermal environment in summer Ding Lin, Jun Wu, Yamin Liu, Mu Zhu, and Chongcheng Chen	Fuzhou University
11:15-11:30	Study on the spatio-temporal distribution of tourists by coupling questionnaire survey and GPS data Dan Li, Yihan Zhang, Ping Wen, Jigang Qiao, Yanling Sheng, and Ruowei Lu	Guangdong University of Finance & Economics
11:30-11:45	Research on Spatial Layout Optimization of Park Green Space in the Main Urban Area of Nanchang Based on Spatial Accessibility Qianyi Dai and Baiyan Wu	National and Local Joint Engineering Laboratory of Geospatial Information Technology
11:45-12:00	GIS-based Classification of Earthquake-related Losses in Yun- nan Zhang Fanghao, Jiang Feirui, and Yu Qingkun	Yunnan Emergency Service Center
12:00-12:15	Accessibility Analysis of Public Service Facilities in Chengdu Based on Crowdsourcing Geographic Data Zaipeng Lou and Baolei Zhang	Shandong Normal Univer- sity







16:45-17:00

17:00-17:15

Zoom ID: 978 3682 8442 for all keynote speeches.

Thursday 18 August 2022, Beijing Time

Zoom ID: 978 3682 8442 for all keynote speeches. **Thursday 18 August 2022, Beijing Time**

Thursday 18 August 2022

分会场报告安排 **Schedule of Sessions**

Session 14 GIS Applications in Watershed Management Chairs: Shixiong Hu, Yiming Zhang

Tencent Meeting ID: 7417386743, bilibili UID: 569306496		
Time	Lectures	Institutes
10:30-10:45	A comparative analysis on landscape connectivity metrics for protected area conservation Wenxin Yang, Amy Frazier, and Peter Kedron	Arizona State University
10:45-11:00	Study on Landscape Ecological Risk and Its Response to Human Activities in the Lower Yellow River Region, China Jiachen Liu and Baolei Zhang	Shandong Normal Univer- sity
11:00-11:15	Ecological network construction and optimization based on circuit theory: a case study of the Jiaodong Peninsula Jieming Kang and Baolei Zhang	Shandong Normal Univer- sity
11:15-11:30	The Spatial Distribution Characteristics Of Erosion Ditch In Helen Black Soil Farming Area Quanfeng Li, Jicheng Li, and Jicheng Li	Northeast Agricultural University
11:30-11:45	Assessing the Dynamic Variations of Ecosystem Services Value in response to Land Use Changes in the Black Soil Region of Northeast, China Wang Lu, Quanfeng Li, and Lijiheng Li	Northeast Agricultural University
11:45-12:00	Impact of Climate Change on Lakes in Pan-Third Pole Nuo Xu, Peng Gou, Andre Daccache, Jiahua Zhang, Tianyu Zhou, Wei Nie, and Yiwei Zhou	University of California Los Angeles
12:00-12:15	Application of Communication, Navigation and Remote Sensing Integration in Water Safety Monitoring in Special Areas Pengjie Zhang, Zhiguo Pang, and Wei Jiang	China Institute of Water Resources and Hydropower Research

ession 9-2 Clim	ate Change and Ea	arth Observati	ions of Permafro	st in High-Latitu	ide
nina					
nairs: Li Sun					

Time	Lectures	Institutes
13:30-13:45	Wetland classification using sparse spectral unmixing algorithm Xiaodong Na, Jie Ding, and Shuying Zang	Harbin Normal Universit
13:45-14:00	Simulation of frozen ground distribution in the frozen ground region of northeast China based on a surface frost number model Daqing Zhan, Haoran Man, Shuying Zang, and Miao Li	Harbin Normal Universi
14:00-14:15	Variations in active layer soil hydrothermal dynamics of typical wetlands in permafrost region in the Great Hing' an Mountains, Northeast China Xingfeng Dong, Chao Liu, Miao Li, Dalong Ma, Qiang Chen, and Shuying Zang	Harbin Normal Universi
14:15-14:30	Occurrence, sources and potential risks of polycyclic aromatic hydrocarbons in a permafrost soil core, northeast China Li Sun	Harbin Normal Universi
Chairs: Da	Remote Sensing for Smart Agriculture meng Yin, Chunyuan Diao, Qingzhi Liu, Jinyan Tian eeting ID: 3462853221, bilibili UID: 488806170	
Chairs: Da Tencent M	meng Yin, Chunyuan Diao, Qingzhi Liu, Jinyan Tian eeting ID: 3462853221, bilibili UID: 488806170 Preliminary comparisons among the Gaofen-1 wide field of view sensors Feng Chen, Wenhao Zhang, Jing Hu, Baisong Zhao, Chenxing Wang, and	Xiamen University of Tec
Chairs: Da Tencent M 15:30-15:45	meng Yin, Chunyuan Diao, Qingzhi Liu, Jinyan Tian eeting ID: 3462853221, bilibili UID: 488806170 Preliminary comparisons among the Gaofen-1 wide field of view sensors	
Chairs: Da Tencent M 15:30-15:45 15:45-16:00	meng Yin, Chunyuan Diao, Qingzhi Liu, Jinyan Tian eeting ID: 3462853221, bilibili UID: 488806170 Preliminary comparisons among the Gaofen-1 wide field of view sensors Feng Chen, Wenhao Zhang, Jing Hu, Baisong Zhao, Chenxing Wang, and Yuejun Song Boundary-aware multi-task neural networks for agricultural field extraction from very high-resolution satellite images	nology The Academy of Digita China (Fujian), Fuzhou U
Chairs: Dai Tencent M 15:30-15:45 15:45-16:00	meng Yin, Chunyuan Diao, Qingzhi Liu, Jinyan Tian eeting ID: 3462853221, bilibili UID: 488806170 Preliminary comparisons among the Gaofen-1 wide field of view sensors Feng Chen, Wenhao Zhang, Jing Hu, Baisong Zhao, Chenxing Wang, and Yuejun Song Boundary-aware multi-task neural networks for agricultural field extraction from very high-resolution satellite images Jiang Long, Mengmeng Li, and Xiaoqin Wang A spatial generalizability remote sensing crop mapping method based on Residual Bayesian Deep Learning fusing artificial prior knowledge	nology The Academy of Digita China (Fujian), Fuzhou U versity
Chairs: Da	meng Yin, Chunyuan Diao, Qingzhi Liu, Jinyan Tian eeting ID: 3462853221, bilibili UID: 488806170 Preliminary comparisons among the Gaofen-1 wide field of view sensors Feng Chen, Wenhao Zhang, Jing Hu, Baisong Zhao, Chenxing Wang, and Yuejun Song Boundary-aware multi-task neural networks for agricultural field extraction from very high-resolution satellite images Jiang Long, Mengmeng Li, and Xiaoqin Wang A spatial generalizability remote sensing crop mapping method based on Residual Bayesian Deep Learning fusing artificial prior knowledge Yongchuang Wu, Yanlan Wu, Penghai Wu, and Hui Yang Rice yield Prediction in Hubei Province based on deep learning	nology The Academy of Digita China (Fujian), Fuzhou U versity Anhui University National Engineering R search Center for Geo graphic Information Sy tem, China University

Extraction of pig farms from high-resolution remote sensing

Suitability analysis of jujube planting area extraction in sentinel-2 image based on NDVI threshold —— a case study of

Yongdong Wang, Lei Wang, Nigela Tuerxun, Lei Luo, Chuqiao Han, and

images based on deep learning

Jielin Guan and Le Li

Ruoqiang County

Jianghua Zheng

Guangdong University of

Technology

Xin Jiang University

Thursday 18 August 2022





Zoom ID: 978 3682 8442 for all keynote speeches. Thursday 18 August 2022, Beijing Time



Session 10-2, 10-3 GIScience for Public Health Chairs: Xun Shi, Peng Jia, Yuanyuan Shi Tencent Meeting ID: 3629684502, bilibili UID: 500166971			
Time	Lectures	Institutes	
13:30-13:45	Ethnic disparities in the association between ambient air pollution and risk for cardiometabolic abnormalities in China Shujuan Yang, Wanqi Yu, and Peng Jia	Sichuan University; Inter- national Institute of Spatial Lifecourse Health (ISLE)	
13:45-14:00	Associations and pathways between residential greenness and hyperuricemia among adults in rural and urban China Bin Yu, Shujuan Yang, and Peng Jia	Sichuan University; In- ternational Institute of Spatial Lifecourse Health (ISLE)	
14:00-14:15	Daily activity pattern changes after COVID-19 lockdown: evidence from working adults in Shenzhen, China Shuhan Yang, Peiling Zhou, Shujuan Yang, and Peng Jia	Wuhan University; Interna- tional Institute of Spatial Lifecourse Health (ISLE)	
14:15-14:30	Evaluation of public health service level at macro scale and its spatial distribution study Yuqi Tang	Wuhan University	
14:30-14:45	Do neighborhood boundaries matter for examining the associations between environmental factors and obesity? Shaoqing Dai and Peng Jia	University of Twente; Inter- national Institute of Spatial Lifecourse Health (ISLE)	
14:45-15:00	Health geography research reporting standards (ISLE-ReSt) Shaoqing Dai and Peng Jia	Wuhan University; In- ternational Institute of Spatial Lifecourse Health (ISLE)	
Tea break			
15:30-15:45	Spatio-Temporal Variations of the COVID-19 Epidemic in Mexico Liran Liu, Gang Xu, Qingxiang Meng, and Kun Qin	Wuhan University	
15:45-16:00	Temporal evolution and spatial pattern of the COVID-19 epidemic in the United States He Xingyu, Meng Qingxiang, and Xu Gang	Wuhan University	



Zoom ID: 978 3682 8442 for all keynote speeches. **Thursday 18 August 2022, Beijing Time**

ession 10-2, 10-3 GIScience for Public Health
hairs: Xun Shi, Peng Jia, Yuanyuan Shi
ncent Meeting ID: 3629684502, bilibili UID: 500166971

Time	Lectures	Institutes
16:00-16:15	Social Inequalities in Residential Environment and Their Association with Health among Adults in Hong Kong, China: Who are Environmentally Disadvantaged and Vulnerable? Ting Zhang and Bo Huang	Shanghai Jiao Tong Univer- sity
16:15-16:30	Air Quality Prediction in Yangtze River Delta Based on GCN- LSTM Lizhi Miao, Sheng Tang, and Yanhui Ren	Nanjing University of Posts and Telecommu- nications
16:30-16:45	Site Selection of New PM2.5 Mobile Monitoring Station Based on Ordinary Kriging Interpolation Xiaolong Li, Tianhao Zhang, Zhongxiang Yang, and Jing Chen	East China University of Technology
16:45-17:00	Exploring the Spatial Scale Effects of Built Environments on Transport Walking: Multi-Ethnic Study of Atherosclerosis Jingjing Li, Amy Auchincloss, Jana Hirsch, Steven Melly, Kari Moore, Adam Peterson, and Brisa Sánchez	Drexel University
17:00-17:15	Using Twitter to track internal migration in the UK before and during the COVID-19 pandemic Yikang Wang, Chen Zhong, Carmen Cabrera-Arnau, and Qili Gao	University College Lon- don
17:15-17:30	A healthy urban street index A case study of city center of Tokyo Fangzhou Zhou, Konomi Ikebe, and Tao Cheng	University College Lon- don







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Thursday 18 August 2022, Beijing Time

Session 15-1, 2 Geospatial Approaches for Human-Environment Interaction Process Chairs: Jun Li, Shaogang Lei

Tencent Meeting ID : 4513385275, bilibili UID : 388953866		
Time	Lectures	Institutes
13:30-13:45	Evaluation of provincial ecological efficiency and regional dif- ference analysis in China Jing Yang and Penglin Zhang	Wuhan University
13:45-14:00	An ORB-SLAM3 Autonomous Positioning and Orientation Approach using 360-degree Panoramic Video Xinge Zhao, Qingwu Hu, Xujie Zhang, and Haiyin Wang	Wuhan University
14:00-14:15	Ship path optimization that accounts for geographical traffic characteristics to increase maritime port safety Hongchu Yu	Wuhan University of Tech- nology
14:15-14:30	Spatio-temporal variation and driving factors of eco-environ- mental quality in Henan section of the Yellow River Basin Shiru Zhang and Xiaolei Wang	Zhengzhou university
14:30-14:45	Local modeling of PM2.5 concentration in Beijing-Tianjin- Hebei area: A multi-scale geographically weighted regression analysis Ju Yuechuang, Ma Yibin, Xiaojin Liang, and Wu Chao	Nanjing University of Posts and Telecommunications
14:45-15:00	A Method for Evaluating the Walking Suitability of Urban Streets with Multi-source Data: A Case Study of Nanjing, China Chen Liu, Zihao Wu, and Ziyu Tong	Nanjing University
15:30-15:45	Object-based image analysis combined with improved DenseNet for land use classification in mining areas Fei Wang, Junting Guo, Shouhang Du, Jun Li, Ziheng Song, Chengye Zhang, and Zhenwei Li	State Key Laboratory of Water Resource Protec- tion and Utilization in Coal Mining, China University of Mining and Technology - Beijing
15:45-16:00	Spatiotemporal Analysis of PM2.5 Variation in the Nanjing City Using Ensemble Empirical Mode Decomposition Yongjuan Liu, Xuan Fang, and Jianjun Cao	Nanjing Xiaozhuang Uni- versity
16:00-16:15	Investigation on the time scale characteristics of the coupling interaction of air pollutants O3 and NO2 in Nanjing City, China Yongjuan Liu, Jianjun Cao, Xuan Fang, and Ying Zhu	Nanjing Xiaozhuang Uni- versity
16:15-16:30	Spatiotemporal Evolution and Meteorological Drivers of PM2.5 Concentrations in the Yangtze River Delta, China Jiaxin Liu, Jie Jiang, and Donglai Jiao	Nanjing University of Posts and Telecommunications
16:30-16:45	Research on improving the accuracy of land cover classifica- tion based on terrain factors and time-series NDVI Yuexin Chen and Shunbao Liao	Institute of Disaster Pre- vention

Zoom ID: 978 3682 8442 for all keynote speeches. Thursday 18 August 2022, Beijing Time



Time	Lectures	Institutes
13:30-13:45	A new method for mining co-location relationship between functions in urban-rural fringe Tianle Li and Xinqi Zheng	China University of Geosci- ences Beijing
13:45-14:00	A Coarse-to-Fine Approach for Urban Land Use Mapping Based on Multisource Geospatial Data Qiaohua Zhou and Rui Cao	The Hong Kong Polytech- nic University
14:00-14:15	Classification of Urban Functional Zones by Integrating Spatial Features of VHR Satellite Images and Semantic Features of POI Data Yixiang Chen, Wenjia Shi, Xu Dang, and Chao Wu	Nanjing University of Posts and Telecommunications
14:15-14:30	Scene classification of high-resolution remote sensing images based on DenseNet and improved active learning. Wendi Xu, Weiming Xu, Dongqing Huang, Xiaoying He, and Kaixiang Pan	The Academy of Digital China, Fuzhou University
14:30-14:45	Characterizing urban expansion pattern to understand urban form dynamics based on Google Earth Engine platform Siyu Wang, Fei Wu, Na Li, Yuhua Chen, Yige Wang, Xiaoyu Zhou, Bei Wang, and Chunhong Zhao	Northeast Normal University, CenNavi Technologies Co., Ltd
14:45-15:00	GCN-based Urban Scene Understanding Integrating Semantic Object-Scene Relations: A case study of Chinese cities Yu Su and Yanfei Zhong	Wuhan University



14:45-15:00

Zoom ID: 978 3682 8442 for all keynote speeches.

Academy of Digital China,

Fuzhou University

Thursday 18 August 2022, Beijing Time

Session 13-2 GeoComputation for Social Science Chairs: Bi Yu Chen, Kun Qin, Tao Jia Tencent Meeting ID: 7753895693, bilibili UID: 32991931			
Time	Lectures	Institutes	
13:30-13:45	Identification of Urban Functional Regions based POI data and the economic contribution index, a case study of Chongqing, China Changyu Gong, Haijiao Chu, Lingjing Ouyang, Siyu Wang, Yonghong Zhao, Chunhong Zhao, and Ziping Liu	Northeast Normal University	
13:45-14:00	Taxi travel time based Geographically Weighted Regression Model (GWR) for modeling public housing prices in Singa- pore Yi' An Wang, Fangyi Cai, Shih-Fen Cheng, Bo Wu, and Kai Cao	East China Normal University, Singapore Management University, National University of Singapore, Jiangxi Normal University	
14:00-14:15	Ambient population, spatial mobility, or both? Exploring the use of social media data for better modeling crime location choice in Beijing, China Chao Jiang	Capital University of Eco- nomics and Business	
14:15-14:30	Assessing University Campus Design Qualities from Open Geospatial Data: Case Studies in Hong Kong Lap-Hin Lau and Rui Cao	The Hong Kong Polytech- nic University	
14:30-14:45	Using machine learning to understand Twitter users' urban green space activities during the COVID-19 pandemic period Nan Cui and Wenyang Shi	University of Leeds, Chang- zhou Univeristy	

Functional Semantic Recognition of Blocks in Urban Built-up

Kaijia Wang, Weiming Xu, Chuyu Li, Erhui Shao, and Hui Yang

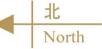
Zoom ID: 978 3682 8442 for all keynote speeches. Thursday 18 August 2022, Beijing Time



Session 16 Human Dynamics for Urban Data Science Chairs: Xinyue Ye, Yang Xu Tencent Meeting ID : 7417386743, bilibili UID : 569306496		
Time	Lectures	Institutes
13:30-13:45	Inversion and Spatial Heterogeneity of Regression Coefficients of Gravity Model for Population Flow in the Wuhan Metropolitan Area Zichao Sun, Yangge Tian, and Ruyue Xiao	Wuhan University
13:45-14:00	Quantifying exploration and preferential return in tourist mobility using mobile big data Xinyue Chen and Yang Xu	The Hong Kong Polytech- nic University
14:00-14:15	Urban fractal structure investigated through the lens of intra- urban clusters Ding Ma, Biao He, Zhigang Zhao, and Wei Zhu	Shenzhen University
14:15-14:30	Urban expansion monitoring based on digital ground model a case study of Beijing Tianjin Hebei Plain Yanping Wang	Institute of Disaster Pre- vention
14:30-14:45	Identification and optimization of functional characteristics of territorial space in Anning City Junsan Zhao, Yilin Lin, Guoping Chen, and Anran Yang	Kunming University of Sci- ence and Technology
14:45-15:00	Spatiotemporal Patterns and Driving Force of Green Buildings in China: A Case Study of Guangzhou Manhua Lin, Lijie Lin, Wanna Zhang, and Qi Zhong	Guangdong University of Technology

Area based on BERT model

Conference Centre South Building The 1st Floor Plan







会议中心南楼二层平面图

Conference Centre South Building The 2nd Floor Plan



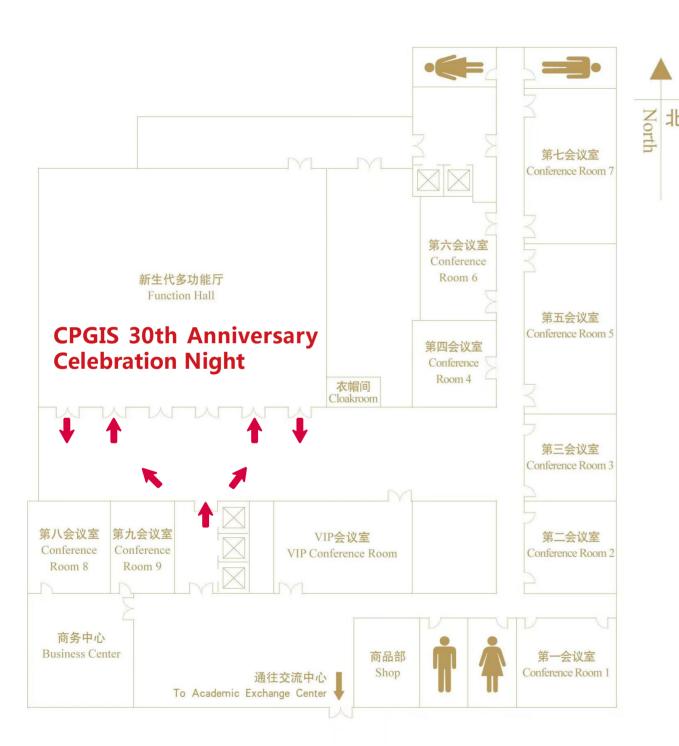






地大国际会议中心二层平面图

Geosciences International Conference Centre





线路一

北京首都国际机场 T2 T3 ——酒店(约 35 公里)

- 机场大巴路线:(从 T2 航站楼站乘坐机场大巴中关村线,经过 5 站,到达学院桥北航北门站),步 行约870米,到达地大国际会议中心。
- 机场快轨路线:全程约60分钟,(二号航站楼或者三号航站楼站上车—东直门换乘13号线向西直门 方向—五道口下车), B口出站向西步行400米, 到达地大国际会议中心。
- 打车费用:预计全程 45 分钟,约 95 元。

线路二

北京大兴国际机场——酒店(约60公里)

- 机场大巴路线: (大兴机场中关村专线,经过6站,中关村下车步行90米,保福寺桥西站换成613 路公交车—学院桥西站下车),步行550米,到达地大国际会议中心。
- 机场地铁路线:大兴机场站—草桥站换成19号线—积水潭站换乘2号线—西直门站换乘13号线— 五道口下车), B口出站向西步行400米, 到达地大国际会议中心。
- 打车费用:预计全程1小时20分钟,约195元。

线路三

北京南站 ——酒店(约19公里)

- 地铁路线:(北京南站乘坐地铁4号线—西直门站换乘13号线—五道口下车),B口出站向西步行 400米,到达地大国际会议中心。
- 打车费用:预计36分钟,约54元

线路四

北京站 ——酒店(约16.5公里)

- 地铁路线:(北京站地铁2号线—西直门站换乘13号线—五道口下车),B口出站向西步行400米, 到达地大国际会议中心。
- 打车费用:预计30分钟,约45元

线路五

北京西站 -酒店(约16公里)

- 地铁路线:(北京西站地铁9号线—国家图书馆站换乘4号线大兴线—西直门站换乘13号线—五道 口下车), B口出站向西步行400米, 到达地大国际会议中心。
- 打车费用:预计36分钟,约40元