



The 28th International Conference on Geoinformatics
2021 CPGIS Annual Conference
 GISciences for a Resilient Society 地理信息助力韧性社会建设

Conference Guide

November 03-05, 2021 | Nanchang, Jiangxi Province, China

- Organizer:** The International Association of Chinese Professionals in Geographic Information Sciences (CPGIS)
- Local Organizer:** Jiangxi Normal University
 The School of Geography and Environment, Jiangxi Normal University
 The Key Laboratory of Poyang Lake Wetland and Watershed Research in Jiangxi Normal University, Ministry of Education of China
- Co-organizers:** The International Society of Digital Earth
 The Geographical Society of China
 The State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University
 The State Key Laboratory of Resources and Environmental Information System, Chinese Academy of Sciences
 The State Key Laboratory of Remote Sensing Science, Chinese Academy of Sciences
 The Key Laboratory of Virtual Geographic Environment in Nanjing Normal University, Ministry of Education of China
 The Institute of Space and Earth Information Science, the Chinese University of Hong Kong





目录 Table of Contents



- 01** 前言
Preface
- 02** 组织架构
Organization
- 08** 主讲嘉宾
Keynote Speakers
- 13** 大会日程一览表
Program Overview
- 16** 会议议程总览
Program Summary
- 23** 分会场报告安排
Schedule of Sessions
- 47** 墙报展示
Schedule of Poster
- 49** 酒店会场平面图
Conference Room Layout



GeoInformatics 2021 (the 28th CPGIS Annual Conference) will be held on November 03-05, 2021 at the Nanchang Hualuxe Hotel, Nanchang, China. The conference is co-hosted by the International Association of Chinese Professionals in Geographic Information Sciences (CPGIS) and Jiangxi Normal University, co-organized by the International Society of Digital Earth, the Geographical Society of China, the State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing at Wuhan University, the State Key Laboratory of Resources and Environmental Information System at Chinese Academy of Sciences, the State Key Laboratory of Remote Sensing Science at Chinese Academy of Sciences, the Key Laboratory of Virtual Geographic Environment in Nanjing Normal University, Ministry of Education of China, the Institute of Space and Earth Information Science at the Chinese University of Hong Kong.

The GeoInformatics Conference series was initiated by CPGIS in 1992 and has been held every year since then. This international conference series has provided a unique forum for exchanging novel ideas and cutting-edge knowledge on geographic information sciences and technologies among GIScience professionals worldwide. The primary theme this year is “GISciences for a Resilient Society” . As the human society is exposed to more frequent and severe disasters, societal resilience becomes vital for sustainable development. This conference will focus on how geographic information science and technology could respond to the challenges and opportunities in building a resilient society.



组织架构 Organization

Organizers:

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

Local Organizers:

Jiangxi Normal University

The School of Geography and Environment, Jiangxi Normal University

The Key Laboratory of Poyang Lake Wetland and Watershed Research (JXNU),MOE,P.R.C

Co-Organizers:

The International Society of Digital Earth

The Geographical Society of China

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

The State Key Laboratory of Resources and Environmental Information System, Chinese Academy of
Sciences

The State Key Laboratory of Remote Sensing Science, Chinese Academy of Sciences

The Key Laboratory of Virtual Geographic Environment in Nanjing Normal University, MOE,P.R.C

The Institute of Space and Earth Information Science, the Chinese University of Hong Kong



International Steering Committee

Honorary Chairs

Guanhua Xu	Chinese Academy of Sciences, China
Michael Batty	Center for Advanced Spatial Analysis, University College London, UK
Michael F. Goodchild	University of California at Santa Barbara, USA
Deren Li	Wuhan University, China

Co-Chairs

Huadong Guo	Chinese Academy of Sciences, China
Guoping Mei	Jiangxi Normal University, China

Members

Luc Anselin	University of Chicago, USA
Yifang Ban	KTH Royal Institute of Technology, Sweden
Jingming Chen	University of Toronto, Canada
Jun Chen	Chinese Academy of Engineering, China
Christophe Claramunt	French Naval Academy Research Institute, France
Stewart Fotheringham	Arizona State University, USA
Jianya Gong	Wuhan University, China
Peng Gong	Tsinghua University, China
Daniel Griffith	University of Texas at Dallas, USA
Renzhong Guo	Shenzhen University, China
Changchui He	Aerospace Information Research Institute, CAS, China
Milan Konecny	Masaryk University, Czech
Mei-Po Kwan	The Chinese University of Hong Kong, China
Qingquan Li	Shenzhen University, China
Yaolin Liu	Wuhan University, China
Paul Longley	University College London, UK
Liqiu Meng	Technical University of Munich (TUM), Germany
Douglas Richardson	Harvard University, USA



组织架构 Organization

Shih-Lung Shaw	University of Tennessee, USA
Xun Shi	Dartmouth College, USA
Daniel Sui	University of Arkansas, USA
Chih-Hong Sun	National Taiwan University, Chinese-Taipei
Vincent Tao	Global Earth Group, China
Vladimir Tikunov	Moscow State University, Russia
Fahui Wang	Louisiana State University, USA
Shaowen Wang	University of Illinois at Urbana-Champaign, USA
Yeqiao Wang	University of Rhode Island, USA
Wanlin Yan	Keio University, Japan
Anthony Yeh	University of Hong Kong, China
Chenghu Zhou	Chinese Academy of Sciences, China
A-Xing Zhu	University of Wisconsin-Madison, USA

Program Committee

Co-Chairs

Qinghua Guo	Chinese Academy of Sciences, China
Hui Lin	Jiangxi Normal University, China

Members

Shuming Bao	China Data Institute, USA
Ling Bian	University at Buffalo, USA
Aijun Chen	George Mason University, USA
Xiang Chen	University of Connecticut, USA
Tao Cheng	University College London, UK
Anrong Dang	Tsinghua University, China
Liping Di	George Mason University, USA
Peijun Du	Nanjing University, China
Pinde Fu	ESRI, USA
Linlin Ge	New South Wales University, Australia
Diansheng Guo	University of South Carolina, USA
Bin Jiang	University of Gävle, Swedish
Yunfeng Kong	Henan University, China
Bin Li	Central Michigan University, USA
Manchun Li	Nanjing University, China
Xiang Li	East China Normal University, China



组织架构 Organization

Zhilin Li	Hong Kong Polytechnic University, China
Lin Liu	University of Cincinnati, USA
Xia Li	University of Queensland, Australia
Yu Liu	Peking University, China
Feng Lu	LREIS, Chinese Academy of Sciences, China
Yongmei Lu	Texas State University, USA
Wei Luo	Northern Illinois University, USA
Guonian Lv	Nanjing Normal University, China
Lan Mu	University of Georgia, USA
Qisheng Pan	Texas Southern University, USA
Fang Qiu	University of Texas at Dallas, USA
Kun Qin	Wuhan University, China
John Shi	Hong Kong Polytechnic University, China
Xiaobo Shu	Jiangxi Normal University, China
Fenzhen Su	LREIS, Chinese Academy of Sciences, China
Guoan Tang	Nanjing Normal University, China
Cuizhen Wang	University of South Carolina, USA
Yehua Wei	University of Utah, USA
Changshan Wu	University of Wisconsin–Milwaukee, USA
Lixin Wu	Central South University, China
Zhifeng Wu	Guangzhou University, China
Yichun Xie	Eastern Michigan University, USA
Bing Xu	Tsinghua University, China
Chaowei Yang	George Mason University, USA
Kun Yang	Yunnan Normal University, China
Xiaobai Yao	University of Georgia, USA
Xinyue Ye	New Jersey Institute of Technology, USA
Benjamin Zhan	Texas State University, USA
Chaosheng Zhang	National University of Ireland, Ireland
Qiming Zhou	Hong Kong Baptist University, China
Xingchang Zhang	Guangzhou University, China



组织架构 Organization

Program Committee

Co-Chairs

Xinyue Ye

New Jersey Institute of Technology

Shixiong Hu

East Stroudsburg University of Pennsylvania

Organizing Committee (from co-organizing units)

Co-Chairs

Hui Lin

CPGIS/CUHK/JXNU

Xiaobo Shu

Jiangxi Normal University

Members

Fan Chen

Aerospace Information Research Institute, CAS

Min Chen

VGE Key Lab of Ministry of Education, Nanjing Normal University

Shuhua Qi

PYL Key Lab of Ministry of Education, China, Jiangxi Normal University

Bo Huang

ISEIS, The Chinese University of Hong Kong

Ying Liu

HIST at Nanchang, Jiangxi Normal University

Huayi Wu

LIESMARS State Key Lab of China, Wuhan University

Jiancheng Shi

Tate Key Lab of Remote Sensing Science of China, CAS and BNU

Fenzhen Su

LREIS State Key Lab of China, CAS

Guoyou Zhang

The Geographical Society of China

Local Organizing Committee (Jiangxi Normal University)

Co-Chairs

Jin Luo

Chaoyang Fang

Members (in Alphabetic)

Adam Devlin

Bisong Hu

Bo Wu

Geying Lai

Hanwu Zhang

Hongmei Zhao

Hua Zhang

Jian Xu

Jianhua Wu

Jiayi Pan



组织架构 Organization

Li Zhang
Lin Li
Lingjia Liu
Linling Tang
Min Huang
Mingjun Ding
Qi Huang
Qiwu Hu
Shun Li
Tao Yang
Xiaofang Zu
Yu Xia
Zhiwei Wu
Taixin Zhang

Secretariat

Co-Chairs

Minsheng Ye

Co-Director

Dan Gao
Yanjiang Pan

Members

Li Zeng
Lu Chen
Jia Liu
Xiaoling Xu
Xiuxiu Zhang
Shan He
Ya Tian
Xin Xiao

**Michael Batty**

Michael Batty is Bartlett Professor of Planning at University College London where he is Chair of the Centre for Advanced Spatial Analysis (CASA). He has worked on computer models of cities and their visualisation since the 1970s and has published several books, such as *Cities and Complexity* (MIT Press, 2005) which won the Alonso Prize of the Regional Science Association in 2011, and most recently *The New Science of Cities* (MIT Press, 2013). His blogs cover the science underpinning the technology of cities and his posts and lectures on big data and smart cities. His research group is working on simulating long term structural change and dynamics in cities as well as their visualisation. Prior to his current position, he was Professor of City Planning and Dean at the University of Wales at Cardiff and then Director of the National Center for Geographic Information and Analysis at the State University of New York at Buffalo. He is a Fellow of the British Academy (FBA), the Academy of Social Sciences (FACSS) and the Royal Society (FRS), was awarded the CBE in the Queen's Birthday Honours in 2004 and the 2013 recipient of the Lauréat Prix International de Géographie Vautrin Lud (generally known as the 'Nobel de Géographie'). This year 2015 he received the Founders Medal of the Royal Geographical Society for his work on the science of cities. In 2016 he received the Gold Medal of the Royal Town Planning Institute, and the Senior Scholars Award of the Complex Systems Society. He has Honorary Doctorates from the State University of New York and from the University of Leicester.

**Deren Li**

Prof. Deren Li is a scientist in surveying, mapping and remote sensing from Wuhan University, China. He enjoys dual memberships of both Chinese Academy of Sciences and Chinese Academy of Engineering. He is also the member of International Eurasia Academy of Sciences and International Academy of Astronautics. He received doctor degree from University of Stuttgart in 1985 and honorary doctorate from ETH Zürich in 2008. In 2012, International Society for Photogrammetry and Remote Sensing awarded him the Honorary Member, the number of which ISPRS limits to a maximum of ten at any time as the highest honor. In 2020, ISPRS awarded him the Brock Gold Medal in recognition of outstanding contributions to photogrammetry.

Prof. Deren Li was the president of Wuhan Technical University of Surveying and Mapping, and director of State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS). At present, he is the honorary director of academic committee of LIESMARS, director of Collaborative Innovation Center of Geospatial Technology, chairman of Wuhan Association for Science and Technology, and chief scientist of Optics Valley of China in Wuhan.

D**主讲嘉宾 Keynote Speakers****Ruizhi Chen**

Dr. Ruizhi Chen is a member of the Finnish Academy of Science and Letters. He is currently the Director of the State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing at Wuhan University. He used to work an Endowed Chair Professor in Texas A&M University Corpus Christ, U.S. and Head & Professor of the Department of Navigation and Positioning at the Finnish Geodetic Institute. He also worked in Nokia as an Engineering Manager during 1998-2001. Dr. Chen was the President of the International Association of Chinese Professionals in Global Positioning Systems in 2008 and a board member of the Nordic Institute of Navigation during 2009-2012. Dr. Chen' s research interests include smartphone indoor positioning and satellite navigation. His research results have been selected as cover stories two times in GPS World.

**Liqiu Meng**

Dr.Liqiu Meng is a professor of cartography in the Department of Aerospace & Geodesy, and the Munich Data Science Institute at the Technical University of Mu-nich (TUM), Germany. She holds B.Sc. (1982) and M.Sc (1985) in cartography at the Information Engineering University of People' s Liberation Army, China, and gained her doctoral degree (1993) in geodetic engineering at Hanover University, Germany. She worked as a senior lecturer for cartography at Gävle University in Sweden (1994-1996). She then became senior technical consultant for GIS for the SWECO Company in Stockholm, whilst also teaching at the Royal Institute of Technology (KTH) (1996-1998). Following her habilitation at the KTH in the field of geoinformatics 1998, she took up in the same year the chair professorship at TUM where she initiated the international master' s program "Cartography" jointly run by TUM, Technical University of Vienna and Technical University of Dresden and University Twente. She teaches courses of cartography and geoinformatics in the Bachelor' s and Master' s program "Geodesy and Geoinformation" and a number of other international master' s programs. She is one of the series editors for Springer Lecture Notes "Geoinformation and Cartography" . Her research interests include geospatial data integration, multimodal navigation algorithm, mobile map services, visual analytics of geodata, open event mapping for climate changes, and ethical issues in artificial intelligence.



主讲嘉宾 Keynote Speakers



Yaqiu Jin

Professor Yaqiu Jin is the Professor of School of Information Science and Engineering, Fudan University, member of the Chinese Academy of Sciences, Fellow of The World Academy of Sciences for the Advancement of Science in Developing Countries, Member of the International Academy of Astronautics, and Life Fellow of The Institute of Electrical and Electronics Engineers (IEEE). He graduated from Peking University in 1970 and obtained a Ph.D. in Electrical Engineering and Computer Science from Massachusetts Institute of Technology (MIT) in 1985. His research fields include microwave remote sensing information technology for planets and planets, computational electromagnetics of complex systems, intelligent information perception and recognition of sky, ground and sea targets, etc. He is the chief scientist of the National Basic Research Program (973 Program) and other national projects. He has won more than 20 science and technology awards, including the IEEE GRSS Outstanding Achievement Award, the IEEE GRSS Education Award, the National Natural Science Award (second class), the inaugural National Award for Excellence in Innovation, the Guanghua Engineering Science and Technology Award (first class), and the Prize of Science and Technology Heroes of Shanghai.



Harvey Miller

Harvey J. Miller is the Bob and Mary Reusche Chair in Geographic Information Science, Professor of Geography and Director of the Center for Urban and Regional Analysis at The Ohio State University. He is also a Courtesy Professor in the City and Regional Planning program in the Knowlton School, a member of the Faculty Advisory Board of the Sustainability Institute, and an affiliated faculty of the Translation Data Analytics Institute at Ohio State. Prof. Miller also chairs the Mapping Science Committee and is a member of the Board on Earth Sciences and Resources of the US National Academies of Sciences, Engineering and Medicine. Prof. Miller's research and teaching interests are at the intersection between geographic information science and transportation, in particular, the analysis of human mobility within cities and regions. The main questions driving his research include sustainable transportation, livable cities, and the relationships between human mobility, health and social equity. In addition to over 150 scientific publications in peer-refereed journals and edited books, Prof. Miller is author (with Shih-Lung Shaw) of *Geographic Information Systems for Transportation: Principles and Applications* (Oxford University Press), and editor (with Jiawei Han) of *Geographic Data Mining and Knowledge Discovery*, second edition (CRC Press). He is an Associate Editor of the journal *Geographic Analysis* and serves on the editorial board of other top journals in geographic information science, spatial analysis and transportation. Prof. Miller's awards and honors include the Hewings Award for Outstanding Young Scholar from the North American Regional Science Council (1997), the Edward L. Ullman Award for Outstanding Contributions to Transportation Geography from the Association of American Geographers (2009) and the Research Award for scholarly contributions to Geographic Information Science from the University Consortium for Geographic Information Science (2015).

D

主讲嘉宾 Keynote Speakers



Jianya Gong

Jianya Gong is a member of the Chinese Academy of Sciences. He has been the Yangtze River Scholars Distinguished Professor, Deputy Director and Director at the State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing (LIESMARS), Wuhan University during 1996-2016. He was invited as a visiting professor at Department of Surveying and Land Information, Hong Kong Polytechnic University during Mar., 1998 to Sep., 1998, visiting professor at Department of Geography and GeoInformation Science in George Mason University during Nov. 2008 to Feb. 2009. He had taken the position of dean of school of Remote Sensing and Information Engineering, Wuhan University from 2015 to 2020. He has served the International Society for Photogrammetry and Remote Sensing (ISPRS) for more than 30 years. He was president of International Association of Chinese Professionals in Geographic Information Sciences (CPGIS) during 2017 - 2018. He has been the Secretary General of Asia GIS Association since 2013. His research interests include geospatial data structure and data model, geospatial data integration and management, geographical information system software, geospatial data sharing and interoperability, Photogrammetry, GIS and remote sensing application. He has undertaken more than 20 national research projects and 20 other research projects, and published 12 books and more than 500 scientific papers. The citations of his papers are more than 20,000.



Wolfgang Kainz

Wolfgang Kainz is a professor emeritus of cartography and geo-information science at the Department of Geography and Regional Research of the University of Vienna, and a visiting professor at the State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing, Wuhan University (LIESMARS). He holds a graduate degree in technical mathematics and computer science and a PHD degree in geo-information science from the Graz University of Technology, Austria. He has more than 40 years of experience in education, research and consulting in the field of geographic information science. In his research he focuses on the theoretical issues of GIS in particular related to spatiotemporal modeling, uncertainty, and topology. He was one of the early pioneers working on formal research on spatial relationships based on topology and ordered sets. He has lead several research groups in Austria and The Netherlands where his expertise was requested in numerous consulting projects worldwide. Prof. Kainz has guided more than 25 international PhD students, has excellent scientific connections worldwide, and held visiting professor positions at universities in Brazil, China, Czech Republic, Kuwait, Taiwan, and the USA.

He served as President of Technical Commission II of ISPRS, as Vice-Dean for Education and International Affairs of the Faculty of Earth Sciences, Geography and Astronomy of the University of Vienna, and as Department Chair. He is the president of the Austrian Cartographic Commission and editor-in-chief of the ISPRS International Journal of Geoinformation. In 2020, he won the ISPRS Wang Zhizhuo Award sponsored by the Chinese Society of Geodesy, Photogrammetry and Cartography (CSGPC).

**Chuang Tao**

Dr Tao is an entrepreneur, and a researcher with vision and passion on geospatial technology and its broad applications. Tao is Founder of wayz.ai, who innovates the spatial-temporal AI technology for smart cities and businesses. As Chairman of Z Ventures Group, Tao has invested and incubated nearly 100 companies in the tech sector. Tao is adjunct professor of five universities and actively involved in technology innovations. Tao is founding partner and former CEO of PPTV, China's leading online TV provider who has served over 300 million active user worldwide. Tao founded his first company GeoTango who pioneered the first internet 3D mapping system and was acquired by Microsoft. Tao was the founding member of Microsoft Virtual Earth program and took a leadership on the development of the Microsoft's global mapping platform serving for over 120 countries and regions.

Prior to his entrepreneur venture, Tao held Canada Research Chair Professorship at York University, Toronto. Tao has authored and co-authored over 200 technical papers, and holds a number of technical patents. Vincent has received many international awards for his achievements both in academia and industry. Recently, he received his Honoria Doc Degree of Laws from York University rewarding his contributions to the society. Tao has also contributed to the establishment of Tao's Student Engineering Scholarship at York University, and ST-AI Innovation Research Program at Wuhan University.

**Yifang Ban**

Professor Yifang Ban is the Director of the Geoinformatics Division at KTH Royal Institute of Technology in Stockholm, Sweden. Before joining KTH in 2004, Dr. Ban was a Tenured Associate Professor at York University in Toronto, Canada. She received a BSc and MSc from Nanjing University, China and a PhD from University of Waterloo, Canada in 1996.

Prof. Ban's research is focused on multitemporal SAR and optical image analysis, data fusion, Earth observation (EO) big data analytics, and their applications in urban and land cover mapping, urbanization, wildfire and other environmental change monitoring, environmental impact assessment, disaster damage assessment and decision support, etc. She has published extensively on these topics.

Professor Ban is a co-lead of Group on Earth Observations (GEO) initiative 'Global Urban Observation and Information', and a co-chair for ICA Commission on Sensor Driven Mapping. She is the PI for the ESA project 'SAR4Wildfire' and the European Lead PI for the project 'EO4SmartCities' within the ESA/China Dragon 4 Program, among others. She is also an invited Expert of the UN Habitat's Technical Committee on Human Settlements Indicators for UN Sustainable Development Goals (SDGs), She has been an Associate Editor and Guest Editor for major Remote Sensing journals and invited expert for EU and national grant application evaluations

Date	Time	ONLINE, Pre-conference
Sunday 31 October 2021	09:00-11:00	Session 1: Spatiotemporal Analysis in Environmental Health Studies
		Session 2: Rapid Response to Emerging Public Health Threats: Data, Tools and Applications
		Session 3: Supporting Women Panel
		Session 4: Spatiotemporal Characterization of Communicable Diseases
Monday 1 November 2021	09:00-11:00	Session 5-1: Theoretical Perspectives on GIScience (Panel)
		Session 6: CPGIS Student Paper Competition
		Session 7: Data Issues in spatial epidemiology
Tuesday 2 November 2021	09:00-12:00	Session 8: Annals of GIS Awarded Papers
		Session 9: Human Dynamics for Urban Data Science (Symposium)
		Session 10: GIS Analysis of Healthcare Delivery, Organization and Outcomes
	21:00-23:00	Session 5-2: Theoretical Perspectives on GIScience (Panel)

Date	Place Time	Hotel Grand Ballroom (5th Floor)	Hualuxe Meeting Room 1&2 (5th Floor)
Wednesday 3 November 2021	09:00-09:50	Opening Ceremony	
	09:50-10:10	Group Photo and Tea Break	
	10:10-12:00	Keynote Speech/Invited Speech	
	13:30-17:00		Session 11: The Development and Innovation of Crime Geography Session 12: InSAR for Monitoring the Urban Infrastructure Health
	18:00-20:00	Welcome Dinner	
Thursday 4 November 2021	09:00-17:30	Keynote Speech	
	18:30-21:00	CPGIS NIGHT	
Friday 5 November 2021	08:30-12:00		Session 17-1: Virtual Geographic Environments Session 18: Urban and Environmental Application of GIS and Remote Sensing
	13:30-17:00		Session 17-2: Virtual Geographic Environments Session 17-3: Virtual Geographic Environments



大会日程一览表 Program Overview

Hualuxe Meeting Room 3 (5th Floor)	Hualuxe Meeting Room 6&7 (5th Floor)	Grand Ballroom 1 (5th Floor)	Grand BallRoom 2 (5th Floor)
Session 13-1: Advances in Remote Sensing of Environment Session 13-2: Advances in Remote Sensing of Environment	Session 14-1: Spatial Analysis of Ocean and Coastal Zone Session 14-2: Spatial Analysis of Ocean and Coastal Zone	Session 15-1: Coastal Disaster Monitoring and Mitigation Session 15-2: Coastal Disaster Monitoring and Mitigation	Session 16-1: Big Earth Data for Disaster Risk Reduction Session:16-2: Big Earth Data for Disaster Risk Reduction
Session 19-1: Street-level Imagery Analytics Session 19-2: Street-level Imagery Analytics	Session 20-1: Cartography and Geovisualization Session 20-2: Cartography and Geovisualization	Session 21-1: Spatially Integrated Humanities and Social Sciences Session 21-2: Spatially Integrated Humanities and Social Sciences	Session 22-1: Spatiotemporal Big Data for Territorial Spatial Planning Session 22-2: Spatiotemporal Big Data for Territorial Spatial Planning
Session 23: Spatial Cognition in the Mobile Information Era Session 24: Geospatial Intelligence	Session 25-1: Geocomputation Session 25-2: Geocomputation	Session 26-1: Modeling Global Change and Sustainable Development Session 26-2: Modeling Global Change and Sustainable Development	Session 27: Remote Sensing for Coastal Sustainability

Sunday 31 October 2021, Beijing Time (ONLINE, Pre-conference)

Time	Session	Chair
09:00-11:00	Session 1: Spatiotemporal Analysis in Environmental Health Studies	Kevin Mwenda
	Session 2: Rapid Response to Emerging Public Health Threats: Data, Tools and Applications	Shuming Bao
	Session 3: Supporting Women Panel	Daoqin Tong
	Session 4: Spatiotemporal Characterization of Communicable Diseases	Meifang Li

Monday 1 November 2021, Beijing Time (ONLINE, Pre-conference)

Time	Session	Chairs
09:00-11:00	Session 5-1: Theoretical Perspectives on GIScience (Panel)	Bin Li and A-Xing Zhu
	Session 6: CPGIS Student Paper Competition	Xiang Chen
	Session 7: Data Issues in Spatial Epidemiology	Xun Shi

Tuesday 2 November 2021, Beijing Time (ONLINE, Pre-conference)

Time	Session	Chairs
09:00-12:00	Session 8: Annals of GIS Awarded Papers	A-Xing Zhu and Min Chen
09:00-11:00	Session 9: Human Dynamics for Urban Data Science (Symposium)	Xinyue Ye, Daniel Sui and Shih-Lung Shaw
	Session 10: GIS Analysis of Healthcare Delivery, Organization and Outcomes	Fahui Wang
21:00-23:00	Session 5-2: Theoretical Perspectives on GIScience (Panel)	A-Xing Zhu and Bin Li

Tuesday 2 November 2021, Beijing Time

09:00-21:00 Registration

Wednesday 3 November 2021, Beijing Time Zoom ID: 881 2090 6709

Time	Sessions	Chair
09:00-09:50	Opening Ceremony	Jin Luo and Qinghua Guo
09:50-10:10	Tea Break	
10:10-10:50	Keynote Speech: Big Earth Data in Facilitating Sustainable Development Goals Huadong Guo	Lixin Wu
10:50-11:30	Keynote Speech: Precise Indoor Positioning Using Mobile Phones Ruizhi Chen	
11:30-12:00	Invited Speech: Geographic Approach for Our Sustainable Future Ning He	

Wednesday 3 November 2021, Beijing Time Zoom ID: 486 750 6122

Time	Sessions	Chairs
13:30-15:00	Session 11: The Development and Innovation of Crime Geography	Lin Liu and Guangwen Song
15:00-15:30	Tea Break	
15:30-17:00	Session 12: InSAR for Monitoring the Urban Infrastructure Health	Peifeng Ma Oriol Monserrat and Xiang Li

Wednesday 3 November 2021, Beijing Time Zoom ID: 969 588 7981

Time	Sessions	Chairs
13:30-15:00	Session 13-1: Advances in Remote Sensing of Environment	Xinlian Liang Yanjuan Su and Qinghua Guo
15:00-15:30	Tea Break	
15:30-17:00	Session 13-2: Advances in Remote Sensing of Environment	Xinlian Liang Yanjuan Su and Qinghua Guo

Wednesday 3 November 2021, Beijing Time 784 198 7461

Time	Session	Chairs
13:30-15:00	Session 14-1: Spatial Analysis of Ocean and Coastal Zone	Fenzhen Su and Fengqin Yan
15:00-15:30	Tea Break	
15:30-17:00	Session 14-2: Spatial Analysis of Ocean and Coastal Zone	Fenzhen Su and Fengqin Yan

Wednesday 3 November 2021, Beijing Time Zoom ID: 890 422 4284

Time	Session	Chairs
13:30-15:00	Session 15-1: Coastal Disaster Monitoring and Mitigation	Adam Thomas Devlin and Jiayi Pan
15:00-15:30	Tea Break	
15:30-17:00	Session 15-2: Coastal Disaster Monitoring and Mitigation	Adam Thomas Devlin and Jiayi Pan
17:00-18:00	Poster	

Wednesday 3 November 2021, Beijing Time Zoom ID: 816 025 7063

Time	Session	Chairs
13:30-15:00	Session 16-1: Big Earth Data for Disaster Risk Reduction	Fang Chen Lizhe Wang and Lei Wang
15:00-15:30	Tea Break	
15:30-17:00	Session:16-2: Big Earth Data for Disaster Risk Reduction	Fang Chen Lizhe Wang and Lei Wang
17:00-18:00	Poster	

Wednesday 3 November 2021, Beijing Time Zoom ID: 502 268 0809

Time	Session	Chair
15:30-17:00	Workshop: Introduce of SCI Journals on Geography and GIS	Min Chen

Thursday 4 November 2021, Beijing Time Zoom ID: 881 2090 6709

Time	Sessions	Chair
09:00-09:40	Keynote Speech: On Geospatial Information Science in the Era of IOT Deren Li	Lin Liu
09:40-10:20	Keynote Speech: Urban Observatory Science: Leveraging Geospatial Data and Real-world Experimentation for Sustainability Harvey Miller	
10:20-10:40	Tea Break	
10:40-11:20	Keynote Speech: Spatial-temporal Big Data enable Social Governance Jianya Gong	Rongxing Li
11:20-12:00	Keynote Speech: Spatio-Temporal AI: A Framework for Hyper Dimensional Data Computation and its Practice Chuang Tao	
12:00-13:30	Lunch	

Time	Sessions	Chair
14:30-15:10	Keynote Speech: The Unbearable Truth in Big Data and Cartography Liqiu Meng	Yaolin Liu
15:10-15:50	Keynote Speech: The Post-Pandemic City: What Will Cities Look Like in the year 2050? Michael Batty	
15:50-16:10	Tea Break	
16:10-16:50	Keynote Speech: The Evolution of GIS – Challenges and Prospects with Examples from a Sino-Austrian Cooperation Wolfgang Kainz	Guoqing Zhou
16:50-17:30	Keynote Speech: EO-A14 Global Change: Earth Observation Big Data & AI for Global Environmental Change Monitoring Yifang Ban	

Thursday 4 November 2021, Beijing Time Zoom ID: 823 020 1691

21:00-22:00 CPGIS Gathering Cuizhen Wang, Song Gao, Qinghua Guo

Friday 5 November 2021, Beijing Time Zoom ID: 486 750 6122

Time	Sessions	Chairs
8:30-10:00	Session 17-1: Virtual Geographic Environments	Min Chen Arzu Çöltekin and Chunxiao Zhang
10:00-10:30	Tea Break	
10:30-12:00	Session 18: Urban and Environmental Application of GIS and Remote Sensing	Shuisen Chen and Shen Ying

Friday 5 November 2021, Beijing Time Zoom ID: 969 588 7981

Time	Sessions	Chairs
8:30-10:00	Session 19-1: Street-level Imagery Analytics	Fan Zhang and Yao Yao
10:00-10:30	Tea Break	
10:30-12:00	Session 19-2: Street-level Imagery Analytics	Fan Zhang and Yao Yao

Friday 5 November 2021, Beijing Time Zoom ID: 784 198 7461

Time	Sessions	Chairs
8:30-10:00	Session 20-1: Cartography and Geovisualization	Fu Ren and Yihong Yuan
10:00-10:30	Tea Break	
10:30-12:00	Session 20-2: Cartography and Geovisualization	Fu Ren and Yihong Yuan

Friday 5 November 2021, Beijing Time Zoom ID: 890 422 4284

Time	Sessions	Chairs
8:30-10:00	Session 21-1: Spatially Integrated Humanities and Social Sciences	Kun Qin and Yaolong Zhao
10:00-10:30	Tea Break	
10:30-12:00	Session 21-2: Spatially Integrated Humanities and Social Sciences	Kun Qin and Yaolong Zhao

Friday 5 November 2021, Beijing Time Zoom ID: 816 025 7063

Time	Sessions	Chairs
8:30-10:00	Session 22-1: Spatiotemporal Big Data for Territorial Spatial Planning	Xinqi Zheng and Chunxiao Zhang
10:00-10:30	Tea Break	
10:30-12:00	Session 22-2: Spatiotemporal Big Data for Territorial Spatial Planning	Xinqi Zheng and Chunxiao Zhang

Friday 5 November 2021, Beijing Time Zoom ID: 486 750 6122

Time	Sessions	Chairs
13:30-15:00	Session 17-2: Virtual Geographic Environments	Min Chen Arzu Çöltekin and Chunxiao Zhang
15:00-15:30	Tea Break	
15:30-17:00	Session 17-3: Virtual Geographic Environments	Min Chen Arzu Çöltekin and Chunxiao Zhang

Friday 5 November 2021, Beijing Time Zoom ID: 969 588 7981

Time	Sessions	Chairs
13:30-15:00	Session 23: Spatial Cognition in the Mobile Information Era	Weihua Dong Haosheng Huang and Amy Griffin
15:00-15:30	Tea Break	
15:30-17:00	Session 24: Geospatial Intelligence	Kai Cao

Friday 5 November 2021, Beijing Time Zoom ID: 784 198 7461

Time	Sessions	Chair
13:30-15:00	Session 25-1: Geocomputation	Huayi Wu
15:00-15:30	Tea Break	
15:30-17:00	Session 25-2: Geocomputation	Huayi Wu

Friday 5 November 2021, Beijing Time Zoom ID: 890 422 4284

Time	Sessions	Chairs
13:30-15:00	Session 26-1: Modeling Global Change and Sustainable Development	Yimin Chen and Xia Li
15:00-15:30	Tea Break	
15:30-17:00	Session 26-2: Modeling Global Change and Sustainable Development	Yimin Chen and Xia Li

Friday 5 November 2021, Beijing Time Zoom ID: 816 025 7063

Time	Sessions	Chairs
13:30-15:00	Session 27: Remote Sensing for Coastal Sustainability	Hongsheng Zhang Mingming Jia and Yiping Chen
15:00-15:30	Tea Break	



Sunday 31 October 2021, Beijing Time

Pre-conference, Online

Session 1: Spatiotemporal Analysis in Environmental Health Studies

Chair: Kevin Mwenda

Time	Lectures	Institutes
09:00-09:15	Applications of Spatial Lifecourse Epidemiology in COVID-19 Research Peng Jia	Wuhan University
09:15-09:30	Adverse Sentiment and Anti-Asian Hate during COVID-19 Alexander Hohl ¹ , Moongi Choi ¹ , Aggie J. Yellow Horse ² , Richard Medina ¹ , Neng Wan ¹ , Ming Wen ¹	1.University of Utah 2.Arizona State University
09:30-09:45	Space-Time Conditional Autoregressive Modeling to Estimate Neighborhood-Level Risks for Dengue Fever in Cali, Colombia Michael R Desjardins ¹ , Matthew D Eastin ² , Rajib Paul ³ , Irene Casas ⁴ , Eric Delmelle ²	1.Johns Hopkins Bloomberg School of Public Health 2.University of North Carolina at Charlotte 3.University of North Carolina at Charlotte 4. Louisiana Tech University
09:45-10:00	Moving Native American Environmental Health Disparities Research Forward Through a Geographic Lens Yan Lin ¹ , Daniel Beene ¹ , and Joseph Hoover ^{1,2}	1.University of New Mexico 2.Montana State University
10:00-10:15	The Impact of Lyme Disease on Forest Ecosystem Service Income: a Time-geography Explanation and Substitution Effects Felix Haifeng Liao	University of Idaho
10:15-10:30	Understanding Geospatial Uncertainty of Reported COVID-19 Cases: A Fine Scale Approach Kevin M. Mwenda	Brown University

Sunday 31 October 2021



分会场报告安排 Schedule of Sessions

Sunday 31 October 2021

Sunday 31 October 2021, Beijing Time

Pre-conference, Online

Session 2: Rapid Response to Emerging Public Health Threats: Data, Tools and Applications Chair: Shuming Bao

Time	Lectures	Institutes
09:00-09:15	Rapid Response to Emerging Public Health Threats: Challenges and Opportunities Shuming Bao	China Data Institute
09:15-09:30	Rapid Response to Emerging Public Health Threats: Big data Collection Biyu Chen, Yuanzhen Shao	Wuhan University
09:30-09:45	Rapid Response to Emerging Public Health Threats: Data Integration and Preservation for Emergency Events Hanchen Yu, Wendy Guan	Harvard University
09:45-10:00	Rapid Response to Emerging Public Health Threats: Efficient and Replicable Data Analysis and Visualization Tao Hu ¹ , Xiaokang Fu ² , Lingbo Liu ²	1.Oklahoma State University 2.Wuhan University
10:00-10:15	Rapid Response to Emerging Public Health Threats: Spatial-temporal Analysis on COVID-19 Data Chaowei Yang	George Mason University
10:15-10:30	Rapid Response to Emerging Public Health Threats: Measuring Human Mobility Using Twitter Data Zhenlong Li	University of South Carolina

Session 3: Supporting Women Panel Chair: Daoqin Tong

Time	Speakers	Institutes
09:00-11:00	Daoqin Tong	Arizona State University
	Mei-Po Kwan	Chinese University of Hong Kong
	Yongmei Lu	Texas State University
	Xiuping Jia	Beijing University of Posts and Telecommunications
	Yifang Ban	KTH Royal Institute of Technology in Stockholm
	Siqin Wang	University of Queensland



Sunday 31 October 2021, Beijing Time

Pre-conference, Online

Session 4: Spatiotemporal Characterization of Communicable Diseases

Chairs: Meifang Li

Time	Lectures	Institutes
09:00-09:15	Integrating Fine-grained Human Mobility into Epidemic Models Ling Yin	Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences
09:15-09:30	Estimating Contact Structure among Feral Swine: Implications for African Swine Fever Transmission and Management Anni Yang ^{1,2,3} , Peter Schlichting ⁴ , Bethany Wight ⁵ , Wesley Anderson ⁵ , Sarah Chinn ⁴ , Mark Wilber ⁶ , Ryan S. Miller ² , Kurt VerCauteren ² , James C. Beasley ⁴ , Raoul Boughton ⁵ , George Wittemyer ¹ , Kim M. Pepin ²	1.Colorado State University 2.Animal and plant health inspection service, United States Department of Agriculture 3.University of Oklahoma 4.University of Georgia 5.University of Florida 6.University of California
09:30-09:45	Natural and Human Environment Interactively Drive Spread Pattern of COVID-19: A City-level Modeling Study in China Xiaoxu Wu, Jie Yin, Chenlu Li, Hongxu Xiang, Meng Lv, Zhiyi Guo	Beijing Normal University
09:45-10:00	Model of Multi-scale Behavior Interaction Scenario for Simulation of Epidemic Transmission Haiping Zhang ^{1,2} , Guoan Tang ^{1,2*} , Zitong Li ^{1,2} , Nuo Zhou Shen ^{1,2} , Haorana Wang ^{1,2}	1.Nanjing Normal University 2.State Key Laboratory Cultivation Base of Geographical Environment Evolution (Jiangsu Province)
10:00-10:15	Geospatial Model-based Estimation for Typhoid Fever in India Yanjia Cao ¹ , Nathan C. Lo ² , Jason R. Andrews ¹	1.Stanford University School of Medicine 2. University of California
10:15-10:30	Battling COVID-19 Epidemic in Nanchang, China: What GIS can do Meifang Li ^{1,2,3} , Xun Shi ³	1.Jiangxi Normal University 2.Nanchang City Center for Disease Control and Prevention 3.Dartmouth College

Sunday 31 October 2021



分会场报告安排 Schedule of Sessions

Monday 1 November 2021

Monday 1 November 2021, Beijing Time

Pre-conference, Online

Session 5-1: Theoretical Perspectives on GIScience (Panel)

Chairs: Bin Li and A-Xing Zhu

Time	Lectures	Institutes
09:00-11:00	Platial Analysis in GIS Song Gao	University of Wisconsin
	Human Mobility and the Neighborhood Effect Averaging Problem (NEAP) Mei-Po Kwan	Chinese University of Hong Kong
	Causal Inferences in Spatial Statistics and Machine Learning Bin Li	Central Michigan University
	Scaling Effects in Global Land Use Analysis and Modelling Xia Li	East China Normal University
	From Spatial Data Handling to Geographical Information Science Zhilin Li	Southwest Jiaotong University
	Virtual Geographic Environment vs. Digital Twin Hui Lin	Jiangxi Normal University
	Opportunities and Challenges in Crime Analysis Lin Liu	University of Cincinnati
	Towards the Four Types of Spatial Effects in Geographical Analysis Yu Liu	Peking University
	How to abstractly describe and express geographic information? Guonian Lu	Nanjing Normal University
	Rethinking Tobler's First Law of Geography in the Age of Quantum Computing Dianzhi Sui	Virginia Tech University
	From Representation to Computation: Theoretical Accounts of Geographic Information May Yuan	University of Texas at Dallas
The Role of GIS in the Development of Smart Society Qiming Zhou	Hong Kong Baptist University	



分会场报告安排 Schedule of Sessions

Monday 1 November 2021, Beijing Time

Pre-conference, Online

Session 6: CPGIS Student Paper Competition

Chairs: Xiang Chen

Time	Lectures	Institutes
09:00-09:15	Identifying China's Polycentric Cities and Evaluating Their Urban Centers Using Nighttime Light Data Zhiwei Yang	Guangzhou University
09:15-09:30	Movement Patterns of Racial-ethnic and Economic Groups in U.S. Top 50 Cities: What Can Social Media Tell us about Segregation? Meiliu Wu	University of Wisconsin-Madison
09:30-09:45	Individual Level Spatial-temporal Modeling of Exposure Potential of Livestock in the Cove Wash Watershed, Arizona Zhuoming Liu	University of New Mexico
09:45-10:00	GIS-automated Delineation of Hospital Service Areas in Florida: From Dartmouth Method to Network Community Detection Methods Changzhen Wang	Louisiana State University

Session 7: Data Issues in Spatial Epidemiology

Chairs: Xun Shi

Time	Lectures	Institutes
09:00-09:15	Advancing COVID-19 Research and Education through Reproducible Geospatial Science Shaowen Wang ¹ , Anand Padmanabhan ¹ , Rebecca Vandewalle ¹ , Xun Shi ² , and Meifang Li ^{2,3}	1.University of Illinois Urbana-Champaign 2.Dartmouth College 3.Jiangxi Normal University
09:15-09:30	Impact of Geographic Scale to the Timely Detection of COVID19 Eric Delmelle ¹ , Michael Desjardins ² , Alex Hohl ³ , Lan Yu ¹	1.University of North Carolina at Charlotte 2.Johns Hopkins Bloomberg School of Public Health 3.University of Utah
09:30-09:45	Mapping Human Mobility Changes and Geospatial Modeling of COVID-19 Spread in the United States Song Gao	University of Wisconsin-Madison
09:45-10:00	Using Reproductions and Replications to Assess the Credibility of Findings in Health Geography and GISci: Some Early Results from Reproductions of COVID-19 Research Peter Kedron ¹ , Joseph Holler ² , Sarah Bardin ¹	1.Arizona State University 2.Middlebury College
10:00-10:15	Integration of Small, Medium, and Big Data for Spatial Epidemiology Xun Shi	Dartmouth College
10:15-10:30	Modeling the Complete Spatiotemporal Spread of the COVID-19 Epidemic in Mainland China Bisong Hu	Jiangxi Normal University

Monday 1 November 2021



分会场报告安排 Schedule of Sessions

Tuesday 2 November 2021, Beijing Time

Pre-conference, Online

Tuesday 2 November 2021

Session 8: Annals of GIS Awarded Papers

Chairs: A-Xing Zhu and Min Chen

Time	Lectures	Institutes
09:00-12:00	Spatiotemporally Varying Coefficients (STVC) model: a Bayesian local regression to detect spatial and temporal nonstationarity in variables relationships Chao Song, Xun Shi, Jinfeng Wang	Sichuan University
	A Bayesian Spatial Shared Component Model for Identifying Crime-general and Crime-specific Hotspots Jane Law, Matthew Quick, Afraaz Jadavji	University of Waterloo
	A Review of Urban Physical Environment Sensing Using Street View Imagery in Public Health Studies Yuhao Kang, Fan Zhang, Song Gao, Hui Lin, Yu Liu	University of Wisconsin-Madison
	Spatial Homogeneity and Heterogeneity of Energy Poverty: A Neglected Dimension Bardia Mashhoodi, Dominic Stead, Arjan van Timmeren	Delft University of Technology
	A Small-patched Convolutional Neural Network for Mangrove Mapping at Species Level Using High-resolution Remote-sensing Image Luoma Wan, Hongsheng Zhang, Guanghui Lin, Hui Lin	The Chinese University of Hong Kong
	Why Public Health Needs GIS: A Methodological Overview Fahui Wang	Louisiana State University
	Land Use/land Cover and Land Surface Temperature Analysis in Wayanad District, India, Using Satellite Imagery J. John, G. Bindu, B. Srimuruganandam, A. Wadhwa, P. Rajan	Vellore Institute of Technology
	Suitable Location Selection for the Electric Vehicle Fast Charging Station with AHP and Fuzzy AHP Methods Using GIS Dogus Guler*, Tahsin Yomralioglu	Istanbul Technical University



分会场报告安排 Schedule of Sessions

Tuesday 2 November 2021, Beijing Time

Pre-conference, Online

Session 9: Human Dynamics for Urban Data Science (Symposium)

Chairs: Xinyue Ye Daniel Sui and Shih-Lung Shaw

Time	Speakers	Institutes
09:00-11:00	Sui Dianzhi	Virginia Tech
	Shaw Shih-lung	The University of Tennessee
	James Caverlee	Texas A&M University
	Ali Mostafavidarani	Texas A&M University
	Bahar Dadashova	Texas A&M University
	Guan Qingfeng	China University of Geosciences (Wuhan)
	Li Xiang	East China Normal University
	Liu Helin	Huazhong University of Science and Technology
	Long Ying	Tsinghua University
	Zhou Jiangping	The university of Hong Kong
Ye Xinyue	Texas A&M University	

Tuesday 2 November 2021



Tuesday 2 November 2021, Beijing Time

Pre-conference, Online

Session 10: GIS Analysis of Healthcare Delivery, Organization and Outcomes

Chairs: Fahui Wang

Time	Lectures	Institutes
09:00-09:15	Automated Delineation of Hospital Service Areas and Hospital Referral Regions by Modularity Optimization Yujie Hu ¹ , Fahui Wang ² , Imam Xierali ³	1.University of Florida 2.Louisiana State University 3.The University of Texas Southwestern Medical Center
09:15-09:30	Geographic Disparities in Radon Exposure and Screening Services in an Urban Environment Dajun Dai	Georgia State University
09:30-09:45	Accessibility to Delivery Care in Hubei Province, China Zhuolin Tao ¹ , Yang Cheng ¹ , Shishuai Du ² , Ling Feng ³ , Shaoshuai Wang ³	1.Beijing Normal University 2.Shandong Experimental High School 3.Huazhong University of Science and Technology
09:45-10:00	Hospital Service Areas for Patients of Hand-Foot-Mouth Decease in Nanchang, China Zeliu Zheng, Fahui Wang	Louisiana State University
10:00-10:15	2SVCA Method for Measuring Geographic Access to Telehealth Fahui Wang	Louisiana State University
10:15-10:30	Industrial Air Pollution and Low Birth Weight a Case-Control Study Using Big Geographic Data Xi Gong ¹ , F. Benjamin Zhan ²	1.University of New Mexico 2.Texas State University



Tuesday 2 November 2021, Beijing Time

Pre-conference, Online

Session 5-2: Theoretical Perspectives on GIScience (Panel)

Chairs: A-Xing Zhu and Bin Li

Time	Lectures	Institutes
21:00-23:00	Social governance on GIS Jianya Gong	Wuhan University
	Geographic Information Science in the Era of Big Data: Challenges and Responses Bo Huang	Chinese University of Hong Kong
	Geography as a Science of the Earth's Surface Founded on the Third View of Space Bin Jiang	University of Gävle, Sweden
	Presentation Title to be Determined Yongmei Lu	Texas State University, USA
	"Here and Now" in HD Maps for Autonomous Driving Liqu Meng	Technical University of Munich, Germany
	Heterogeneity of Geographic Flows Tao Pei	The Chinese Academy of Sciences
	Similarity in the Third Law of Geography Xun Shi	Dartmouth College, USA
	Dealing with Non-structural Geographic Information Data Huayi Wu	Wuhan University
	Human Dynamics for GeoDesign Xinyue Ye	Texas A&M
	Polygon-based Watershed Analysis: Coupled Human and Natural Systems Xiaoxiang Zhang	Hohai University
The Third Law of Geography: What the big deal? Axing Zhu	University of Wisconsin, USA	

Tuesday 2 November 2021



分会场报告安排 Schedule of Sessions

Wednesday 3 November 2021, Beijing Time

Zoom ID: 969 588 7981

Wednesday 3 November 2021

Session 11: The Development and Innovation of Crime Geography

Chairs: Lin Liu and Guangwen Song

Time	Lectures	Institutes
13:30-13:45	Elements of Crime Analysis Lin Liu	University of Cincinnati Guangzhou University
13:45-14:00	Street Permeability, Neighborhood Context and Residential Burglary: A Test of Multilevel Criminal Opportunity Theory in Wuhan, China Han Yue	Guangzhou University
14:00-14:15	Effects of Three Types of Ambient Population on Theft on Weekdays and Weekends in Beijing, China Guangwen Song	Guangzhou University
14:15-14:30	Ambient Population and Larceny-Theft: A Spatial Analysis Using Mobile Phone Data Li He	Xi'an Jiaotong University
14:30-14:45	Measuring Large-scale Neighborhood-level Fear of Crime based on Small Sample Surveys and Street View Big Data Fengrui Jing	Sun Yat-sen University
15:00-15:30	Tea Break	

Session 12: InSAR for Monitoring the Urban Infrastructure Health

Chairs: Peifeng Ma Oriol Monserrat and Xiang Li

15:30-15:45	Deformation Monitoring at European Scale: the Copernicus Ground Motion Service Michele Crosetto	Centre Tecnològic de Telecomunicacions de Catalunya- CTTC
15:45-16:00	Lu Tan-1(LT-1): The First Chinese L-Band Differential Interferometric SAR Satellites for Terrain and Subsidence Monitoring Tao Li	Land Satellite Remote Sensing Application Center, MNR
16:00-16:15	Linking Multi-sensor SAR Data in Time and Space Ling Chang, Bin Zhang and Alfred Stein	University of Twente
16:15-16:30	Sentinel-1 for Urban and Infrastructure Monitoring: an Overview Oriol Monserrat	Centre Tecnològic de Telecomunicacions de Catalunya- CTTC
16:30-16:45	Monitoring of Subsidence along High Speed Railways in China Using Sentinel-1, PALSAR-2 and TerraSAR-X Qingli Luo, Zheng Zhao	Tianjin University
16:45-17:00	Distributed Scatterer Interferometry for Airport Subsidence Monitoring Guoqiang Shi	The Chinese University of Hong Kong



分会场报告安排 Schedule of Sessions

Wednesday 3 November 2021, Beijing Time

Zoom ID: 969 588 7981

Session 13-1: Advances in Remote Sensing of Environment Chairs: Xinlian Liang Yanjun Su and Qinghua Guo

Time	Lectures	Institutes
13:30-13:45	Close-range Remote Sensing for Assessment of Forest Carbon Sequestration and Flux: Opportunities and Challenges Xinlian Liang	Wuhan University
13:45-14:00	Reflectance and Sun-induced Chlorophyll Fluorescence for Vegetation Structural and Functional Traits Monitoring: Modelling and Applications Peiqi Yang	University of Twente
14:00-14:15	Segmentation Network with Larger Receptive Field Cannot Benefit Cloud Detection Task Longkang Peng, Xuehong Chen, Jin Chen, Wenzhi Zhao, Licong Liu	Beijing Normal University
14:15-14:30	Impacts of Radiance Quantization on Surface Mapping: Comparisons among the Landsat Sensors Feng Chen, Ziqun Zhang, Wenhao Zhang, Yuejun Song	Xiamen University of Technology
14:30-14:45	A Model for Radiative Transfer in Heterogeneous 3D Vegetation Canopies and its Applications in Remote Sensing Jianbo Qi	Beijing Forestry University
14:30-14:45	Quantifying the Effect of Registration Error on Deep Learning-based Spatio-Temporal Fusion Methods Zurui Ao	Sun Yat-sen University
15:00-15:30	Tea Break	

Session 13-2: Advances in Remote Sensing of Environment Chairs: Xinlian Liang Yanjun Su and Qinghua Guo

15:30-15:45	Province based on Sentinel-1/2 data Mengyun Li, Liang Hong	Yunnan Normal University
15:45-16:00	MODIS and VIIRS LAI/FPAR Products Kai Yan	China University of Geoscience (Beijing)
16:00-16:15	Study on Soil erosion of Qinhe River Basin Based on GIS and RUSLE Yiming Zhang, Weixuan Lyu, Shixiong Hu	East Stroudsburg University
16:15-16:30	Land Surface Temperature Variability over Various Land Covers in Punjab (Pakistan) from MODIS Data Usman Mazhar, Shuanggen Jin, Muhammad Bilal	Nanjing University of Information Science and Technology
16:30-16:45	Towards SaaS: from Pixel to Services Tao Guo	PIESAT Information Technology Co., Ltd

Wednesday 3 November 2021



分会场报告安排 Schedule of Sessions

Wednesday 3 November 2021, Beijing Time

Zoom ID: 784 198 7461

Wednesday 3 November 2021

Session 14-1: Spatial Analysis of Ocean and Coastal Zone

Chairs: Fenzhen Su and Fengqin Yan

Time	Lectures	Institutes
13:30-13:45	Process: An analyzing Scale of Geographic Dynamics Cunjing Xue, Fenzhen Su	Aerospace Information Research Institute, CAS
13:45-14:00	Topography Analysis of Coral Reefs in Xisha Islands based on Satellite data Xiuling Zuo, Zhengxian Duan, Guanghua Wang, Kefu Yu, Fenzhen Su, Huisheng Wu	Guangxi University
14:00-14:15	Expansion of Construction Land in the Coastal Areas: A Case Study of the Guangdong - Hong Kong - Macao Greater Bay Area, China Xuege Wang, Fengqin Yan, Fenzhen Su	Nanjing University
14:15-14:30	Land Use Optimization based on the Synergistic Development of Urban Agglomeration Tingting Pan	Institute of Geographic Sciences and Natural Resources Research, CAS
14:30-14:45	Researches on Sea Surface Temperature Reconstruction based on Deep Learning Technique Bo Ping	Tianjin University
15:00-15:30	Tea Break	

Session 14-2: Spatial Analysis of Ocean and Coastal Zone

Chairs: Fenzhen Su and Fengqin Yan

15:30-15:45	Spatial Analysis of River Mouth Based on Remotely Sensed Data Dongjie Fu	Institute of Geographic Sciences and Natural Resources Research, CAS
15:45-16:00	Mining Coastal Land Use Sequential Patterns along the Sea-Land Direction Zhi Ding	Southwest University
16:00-16:15	Analyzing the Offshore Hydrocarbon Exploitation Dynamics in the South China Sea Using Time-series VIIRS NTL Images Qi Wang, Wenzhou Wu, Fenzhen Su, Han Xiao	Shandong Jianzhu University
16:15-16:30	Coastal Wetland Reclamation and Ecological Service Value Evaluation: a case study of Jiaozhou Bay and the Yellow River Delta Shiyi Zhao	Shandong University of Science and Technology



分会场报告安排 Schedule of Sessions

Wednesday 3 November 2021, Beijing Time

Zoom ID: 890 422 4284

Session 15-1: Coastal Disaster Monitoring and Mitigation

Chairs: Adam Thomas Devlin and Jiayi Pan

Time	Lectures	Institutes
13:30-13:45	Tidal and Wind Mixing in the Arafura Sea Robin Robertson	Xiamen University Malaysia
13:45-14:00	Enhanced Vertical Transport Induced by Typhoon in the Northwestern South China Sea Xie Lingling	Guangdong Ocean University
14:00-14:15	Tropical Cyclone Estimation from Geostationary Satellite Using Convolutional Neural Networks Xu Qing	Ocean University of China
14:15-14:30	Spatio-temporal Analysis of Wave Energy Dissipation on Barrier Island Chain using Sentinel-1 SAR imagery Fabian S. Pramudya	Chinese University of Hong Kong
14:30-14:45	Sea Level Variations in China Seas Cheng Yongcun	PieSat Company
14:45-15:00	Response of Chlorophyll-a Concentration to Late Autumn Typhoon Events in the Northwestern South China Sea Li Junyi	Guangdong Ocean University
15:00-15:30	Tea Break	

Session 15-2: Coastal Disaster Monitoring and Mitigation

Chairs: Adam Thomas Devlin and Jiayi Pan

15:30-15:45	Long-term Flood-hazard Risk Analysis for Urban Area of Yangtze Estuary based on Multi-platform MT- InSAR Measurements and a Hydrodynamic Model Zhao Qing	East China Normal University
15:45-16:00	Plume Dynamics in Bangladesh Offshore ? Sun Yujuan	National Oceanography Centre, UK
16:00-16:15	A data-driven Model to Quantify the Impact of River Discharge on Tide-river Dynamics in the Yangtze River Estuary Cai Huayang	Sun Yat-sen University
16:15-16:30	Circulation of the Chukchi Sea Shelfbreak and Slope from Observations Li Min	Guangdong Ocean University
16:30-16:45	Flood Risk Investigation of the Shanghai Pudong International Airport Tang Maochuan	East China Normal University
16:45-17:00	Detection of Algal Blooms using Landsat-8 OLI Imagery: Development and Testing of a Novel Method and Evaluation of the Existing Indices Majid Nazeer	East China University of Technology (ECUT)

Wednesday 3 November 2021



分会场报告安排 Schedule of Sessions

Wednesday 3 November 2021, Beijing Time

Zoom ID: 816 025 7063

Wednesday 3 November 2021

Session 16-1: Big Earth Data for Disaster Risk Reduction Chairs: Fang Chen Lizhe Wang and Lei Wang

Time	Lectures	Institutes
13:30-13:45	Exposure Elements in Disaster Databases and Availability for Local Scale Application: Case Study of Kuala Lumpur, Malaysia Fasha Muhamad	SEADPRI-Universiti Kebangsaan Malaysia, Malaysia
13:45-14:00	Identifying Negative Labels using PU- Learning Approach for Automated Large Scale Monitoring of Fire Risk Zeeshan Shirazi	CAS-TWAS Centre of Excellence on Space Technology for Disaster Mitigation
14:00-14:15	Forest Fire Monitoring using Spatial-statistical and Geo-spatial Analysis of Factors Determining Forest Fire in Margalla Hills, Islamabad, Pakistan Aqil Tariq, Linlin Lu	Wuhan University/Aerospace Information Research Institute, CAS
14:15-14:30	A Geomorphic Approach for Identifying Flash Flood Potential Areas in the East Rapti River Basin of Nepal Til Prasad Pangali Sharma, Jiahua Zhang and Lkhagvadorj Nanzad	CAS-TWAS Centre of Excellence on Space Technology for Disaster Mitigation
14:30-14:45	Analyzing NPP Response of Different Rangeland Types to Climatic Parameters over Mongolia Lkhagvadorj Nanzad, Zhang Jiahua and Til Prasad Pangali Sharma	CAS-TWAS Centre of Excellence on Space Technology for Disaster Mitigation
15:00-15:30	Tea Break	

Session:16-2: Big Earth Data for Disaster Risk Reduction Chairs: Fang Chen Lizhe Wang and Lei Wang

15:30-15:45	The Spatial Impact Changes of Heat Wave Disasters based on Long Time Series: A Case Study of Qingdao, China Zhijun Jiao, Genyun Sun, Aizhu Zhang, Yuye Zhang and Zheng Li	China University of Petroleum
15:45-16:00	Urbanization-driven Increases in Summertime Compound Heat Extremes across China Sijia Wu, Ting On Chan, Wei Zhang, Guicai Ning, Peng Wang, Xuelin Tong, Feng Xu, Hao Tian, Yu Han, Yongquan	Sun Yat-sen University
16:00-16:15	Modelling Deep Convective Activity using Lightning Clusters and Machine Learning Manxing Shi, Xiuguo Liu, Peng Fan	China University of Geosciences (Wuhan)
16:15-16:30	Using Artificial Intelligence to Estimate the Probability of Forest Fires in Heilongjiang, Northeast China Zechuan Wu, Mingze Li, Bin Wang	Northeast Forestry University



分会场报告安排 Schedule of Sessions

Friday 5 November 2021, Beijing Time

Zoom ID: 486 750 6122

Session 17-1: Virtual Geographic Environments

Chairs: Min Chen Arzu Çöltekin and Chunxiao Zhang

Time	Lectures	Institutes
08:30-08:45	A Knowledge-based Virtual Geographic Environment for WRF Simulation Chunxiao Zhang, Heng Li, Ziwei Xiao, Xinqi Zheng	China University of Geoscience (Beijing)
08:45-09:00	Three-dimensional Visual Perception Modeling of Individual Soldiers in Combat Simulation Congjie Guo, Bingli Xu*, Tao Jing, Yang Zhang, Hairong Hu, Lihui wang	Academy of Army Armored Force
09:00-09:15	Coupled Natural-human Land Loss Modeling in the Lower Mississippi River Basin Heng Cai, Nina Lam, Lei Zou	Texas A&M University
09:15-09:30	Analyzing Rescue Requests on Social Media to Enhance Disaster Response and Resilience Lei Zou, Bing Zhou, Binbin Lin, Nina S.N. Lam, Volodymyr Mihunov	Texas A&M University
09:30-09:45	PyCLiPSM: Harnessing Heterogeneous Computing Resources on CPUs and GPUs for Accelerated Digital Soil Mapping Guiming Zhang, A-Xing Zhu, Jing Liu, Shanxin Guo, Yunqiang Zhu	University of Denver
09:45-10:00	Modeling the Stream Bank Stability in Paradise Creek Watershed, PA Using GIS Shixiong Hu, Mengya Jia, Jeffrey Hardy	East Stroudsburg University
10:00-10:30	Tea Break	

Session 18: Urban and Environmental Application of GIS and Remote Sensing

Chairs: Shuisen Chen and Shen Ying

10:30-10:45	Evaluating Road Network Capacity in the Semantic Geosp Rou Jiang, Sirui Yan, Jiangwei Chen, Shuohong Xie, Yiming Yang, Xiaoliang Meng, Yuchun Huang	Wuhan University
10:45-11:00	Study on Coupling and Coordinated Development of Urban Spatial Expansion and Ecosystem Service Value in Typical Oasis Cities of Arid Region——take the Kashgar city as an example Bumairiyemu Maimaaiti, Shuisen Chen	Guangzhou Institute of Geography
11:00-11:15	Optimizing UAV Traffic Monitoring Routes with Spatiotemporal Variation of Monitoring Demand Qianqian Wu, Ke Wang, Chuli Hu	China University of Geosciences
11:15-11:30	Time-dependent Vehicle Routing Problem of City Logistics with Customer Satisfaction Yuanyuan Li, Qingfeng Guan, Yao Yao	China University of Geosciences
11:30-11:45	Spatial Autoregressive Analysis of Nationwide Street Network Patterns with Global Open Data Qi Zhou, Hao Lin, Junya Bao	China University of Geosciences

Friday 5 November 2021



分会场报告安排 Schedule of Sessions

Friday 5 November 2021, Beijing Time

Zoom ID: 969 588 7981

Friday 5 November 2021

Session 19-1: Street-level Imagery Analytics

Chairs: Fan Zhang and Yao Yao

Time	Lectures	Institutes
08:30-08:45	Photovoltaic Capacity Estimation on Urban Streets Using Street View Image Teng Fei	Wuhan University
08:45-09:00	What You See Is What You Get: Delineating the Urban Jobs-Housing Spatial Distribution at A Parcel Scale by Using Street View Imagery Based on Deep Learning Technique Yao Yao	China University of Geosciences (Wuhan)
09:00-09:15	Typeface from Google Street View Reveals Spatial Economical Patterns Ruixian Ma	Alibaba Group
09:15-09:30	Experienced Diversity: Quantifying the Connection between Street-level Urban Changes and Social Mixing Zhuangyuan Fan	The University of Hong Kong
09:30-09:45	Measuring the Transparency of Street Interface in the Context of Computational Urban Design: A Large-Scale Analysis based on Street View Images and Deep Learning Yu Ye	Tongji University
09:45-10:00	To Walk or Not to Walk? Examining Non-linear Effects of Streetscape Greenery on Walking Trip Propensity of Older Adults Linchuan Yang	Southwest Jiaotong University
10:00-10:30	Tea Break	

Session 19-2: Street-level Imagery Analytics

Chairs: Fan Zhang and Yao Yao

10:30-10:45	City-scale Mapping of Urban Facade Color Using Street-View Imagery Teng Zhong	Nanjing Normal University
10:45-11:00	Interrogating the Spatial and Social Configurations of Streetscapes Using Space Syntax and GIS Shalika Dharmasthala, Qian (Chayn) Sun, Nano Langenheim	RMIT University
11:00-11:15	Dynamic Target Tracking and Geospatial Transformation in Place Based on DNN Zhigang Han, Feng Liu, Qian Li, Caihui Cui	Henan University
11:15-11:30	Fine-scale Population Estimation Based on Building Classification Shunli Wang	Wuhan University



分会场报告安排 Schedule of Sessions

Friday 5 November 2021, Beijing Time

Zoom ID: 784 198 7461

Session 20-1: Cartography and Geovisualization

Chairs: Fu Ren and Yihong Yuan

Time	Lectures	Institutes
08:30-08:45	Understanding Urban Dynamics from Bluetooth Tracking Data: An Exploratory Analysis Yihong Yuan	Texas State University
08:45-09:00	Adaptively Transfer Expressive Styles from Images to Digital Maps and Visualizations Mingguang Wu	Nanjing Normal University
09:00-09:15	Bionic Modeling of Urban Natural Scene Biao He	Shenzhen University
09:15-09:30	Atlas of Shenzhen: Storymaps Inspired by City Force Fu Ren	Wuhan University
09:30-09:45	Using Map Generalization to Enhance Spatial Data Matching Haizhong Qian, Xiao Wang	Information Engineering University
10:00-10:30	Tea Break	

Session 20-2: Cartography and Geovisualization

Chairs: Fu Ren and Yihong Yuan

10:30-10:45	Improving Map Generalization Technology Using Deep Learning: Cases and Analysis Min Yang	Wuhan University
10:45-11:00	A Novel Approach to 3D Reconstruction Technology of Small Cultural Relics Based on Spatial Coded Texture Image Projection Yuting Chen, Qingwu Hu, Zhumao Lu, Hao Gong	Wuhan University
11:00-11:15	Vision-Based Movement Recognition of Badminton Players Using Deep Learning and Binocular Positioning Jiabei Luo, Yujie Hu, Xiang Li	East China Normal University
11:15-11:30	A City 3D Model Construction Method Based on 3Ds Max and Smart 3D Jincai Xu, Chaokui Li, Jianhui Chen	Hunan University of Science and Technology
11:30-11:45	An Ensemble Learning Approach for Urban Land Use Mapping Based on Remote Sensing Imagery and Social Sensing Data Houji Qi	Peking University

Friday 5 November 2021



分会场报告安排 Schedule of Sessions

Friday 5 November 2021, Beijing Time

Zoom ID: 890 422 4284

Friday 5 November 2021

Session 21-1: Spatially Integrated Humanities and Social Sciences Chairs: Kun Qin and Yaolong Zhao

Time	Lectures	Institutes
08:30-08:45	Silk Road Historical Geographical Information System Yangfang Hou	Fudan University
08:45-09:00	Big Social Media Data Analytics: Approaches and Applications in Disaster Management Zhenlong Li	University of South Carolina
09:00-09:15	A Review of Historical GIS and Its Trend Yaolong Zhao	South China Normal University
09:15-09:30	A Review of Spatially Integrated Humanities and Social Sciences Kun Qin	Wuhan University
09:30-09:45	Estimation of Regional Economic Development Indicator from Transportation Network Analytics Song Gao	University of Wisconsin-Madison
09:45-10:00	Identifying Temporal Patterns of Multilateral Spatial Interactions: Using International Trades as An Example Wei Luo, May Yuan	National University of Singapore
10:00-10:30	Tea Break	

Session 21-2: Spatially Integrated Humanities and Social Sciences Chairs: Kun Qin and Yaolong Zhao

10:30-10:45	Evaluating the Potential Impacts of Land Use Changes on Ecosystem Service Value under Multiple Scenarios in Support of SDG Reporting: A Case Study of the Wuhan Urban Agglomeration Kaifeng Peng, Weiguo Jiang, Yue Deng	Beijing Normal University
10:45-11:00	Spatial Differentiation of Traditional Villages: A Case Study of Gansu Province Haowen Yan, Jianglei Jin	Lanzhou Jiaotong University
11:00-11:15	Spatial Spillover Effects of Investment-Induced Gentrification: The Case of the Shenzhen Jin Zeng, Yang Yue, Qili, Gao, Tianhong Zhao	Shenzhen Key Laboratory of Spatial Smart Sensing and Services
11:15-11:30	Comparative Ecological Network Pattern Analysis: An Application to Nanchang Binbin Ma, Zhu-an Chen	East China University of Technology



分会场报告安排 Schedule of Sessions

Friday 5 November 2021, Beijing Time

Zoom ID: 816 025 7063

Session 22-1: Spatiotemporal Big Data for Territorial Spatial Planning Chairs: Xinqi Zheng and Chunxiao Zhang

Time	Lectures	Institutes
08:30-08:45	Monitoring Agricultural Land Use Change Based on Remote Sensing Cloud Computing Jinwei Dong	Institute of Geographic Sciences and Natural Resources Research, CAS
08:45-09:00	Application and Thinking of Big Data in Land Spatial Planning Wenhua Guo	Ministry of Natural Resources of the People's Republic of China
09:00-09:15	Technology And Application of Resource Big Data and Territorial Spatial Planning Scheme Optimization Xinqi Zheng	China University of Geosciences in Beijing
09:15-09:30	Innovating Geospatial Big data Ecosystem for sustainable development Yueqin Zhu	Development Research Center of China Geological Survey
09:30-09:45	Discussion on the Practice of Data Processing of GNSS Precise Point Positioning Xiliu Yang, Jiudong Yang	University of Waterloo
10:00-10:30	Tea Break	

Session 22-2: Spatiotemporal Big Data for Territorial Spatial Planning Chairs: Xinqi Zheng and Chunxiao Zhang

10:30-10:45	SMART-IMPALA: Efficient Querying of Hyper Massive Spatiotemporal Trajectory Data Lianjie Zhou, Wei Tu, Qingquan Li	Shenzhen University Chongqing Jiaotong University
10:45-11:00	Identifying the Relationship between Air Quality and Road Network Cellular Pattern in China Jing Tian, Yuhua Liao, Yiheng Wang, Chang Ren	Wuhan University
11:00-11:15	Urban Functional Area Identification Method and Its Application Combined OSM Road Network Data with POI Data Yang Jian, Li Chaokui, Liu Yan	Hunan University of Science and Technology
11:15-11:30	Multipurpose Temporal GIS Model for Cadastral Data Management Joseph Mango, Xiang Li	East China Normal University
11:30-11:45	Measuring Spatial Accessibility of Public Service by Optimal Supply-Demand Allocation Shiyan Zhai	Henan University

Friday 5 November 2021



分会场报告安排 Schedule of Sessions

Friday 5 November 2021, Beijing Time

Zoom ID: 486 750 6122

Friday 5 November 2021

Session 17-2: Virtual Geographic Environments

Chairs: Min Chen Arzu Çöltekin and Chunxiao Zhang

Time	Lectures	Institutes
13:30-13:45	Data Assimilation and Information Integration Sharing of Sichuan-Tibet Railway Disaster Risk Yulin Ding	Southwest Jiaotong University
13:45-14:00	Green View Index Estimation Method Based On Three-dimensional Simulation of Urban Tree Landscape Liyu Tang and Chongcheng Chen	Fuzhou University
14:00-14:15	A Simplification Method of Disaster Virtual Geographic Scenes Based on Tunnel Vision Lin Fu, Jun Zhu, Weilian Li, Pei Dang, Jigang You	Southwest Jiaotong University
14:15-14:30	A Mobile Virtual Reality System for Intelligent Highway Simulation Teaching Pei Dang, Jun Zhu, Weilian Li, Lin Fu, Jianlin Wu, Xiaoqi Qiao	Southwest Jiaotong University
14:30-14:45	Digital Twin 3D Spatial Information Platform of Sichuan-Tibet Railway Qing Zhu	Southwest Jiaotong University
14:45-15:00	Symbolization Fusion Method of Dynamic Information and Map Based on OGC SLD Songshan Yue, Jingming Pan, Yongning Wen, Min Chen, Guonian Lv	Nanjing Normal University
15:00-15:30	Tea Break	

Session 17-3: Virtual Geographic Environments

Chairs: Min Chen Arzu Çöltekin and Chunxiao Zhang

15:30-15:45	A Perception Model for Optimizing and Evaluating Evacuation Guidance Systems Lin Huang, Jianhua Gong, Wenhong Li	Aerospace Information Research Institute, CAS
15:45-16:00	Supporting Distance Estimations in Immersive Virtual Geographic Environments Dennis Edler	Ruhr-Universität Bochum, RUB
16:00-16:15	Teaching Spatial Tasks in VGE. Petr Kubíček	Geografický ústav Masarykova univerzita
16:15-16:30	Co-Visualization of Environmental Data in Urban Spaces Sidonie Christophe	LASTIG/GEOVIS Team Leader
16:30-16:45	Human Factors in VR: A Focus on Aging and Navigation Arzu Çöltekin	University of Applied Sciences and Arts Northwestern Switzerland FHNW
16:45-17:00	Embodied Digital Twins, Paradigmatic Change for Place-Based Decision Making Klippel Alexander	The Pennsylvania State University



分会场报告安排 Schedule of Sessions

Friday 5 November 2021, Beijing Time

Zoom ID: 969 588 7981

Session 23: Spatial Cognition in the Mobile Information Era Chairs: Weihua Dong Haosheng Huang and Amy Griffin

Time	Lectures	Institutes
13:30-13:45	Geospatial Cognition Based on Brain Neural Mechanisms Weihua Dong	Beijing Normal University
13:45-14:00	Choose Your Own Route – Supporting Pedestrian Navigation without Restricting the User to A Predefined Route Haosheng Huang	Ghent University, Belgium
14:00-14:15	Cultural Differences in Perception of Point Symbols Between Australian and Chinese Map Users Bradley Denney, Amy L. Griffin, Zdeněk Stachoň	Bespoke Maps & Data, Melbourne, Australia
14:15-14:30	Cognition of Digital Twin Environments Using Eye Tracking Shulei Zheng	Information Engineering University
14:30-14:45	Spatial Cognition Difference in GE Wayfinding Shen Ying	Wuhan University
14:45-15:00	Identifying Map Users with Eye Movement Data from Self-Localization and Spatial Orientation Tasks Hua Liao	Hunan Normal University
15:00-15:30	Tea Break	

Session 24: Geospatial Intelligence Chairs: Kai Cao

15:30-15:45	A Matheuristic Algorithm for the Single-Source Capacitated Facility Location Problem and Its Variants Kong Yunfeng	Henan University
15:45-16:00	Research on Domain Variable Identification among Different Data Cubes Yanling Yang, Jingsongdi Yu, Ruiju Tong	Fuzhou University
16:00-16:15	Design and Application of Storage and Query Algorithm for Vector Spatial Data Based on Hbase Li Chaokui, Wang Luyao, Xiao Keyan	Hunan University of Science and Technology
16:15-16:30	An Improved Framework for Multilane Roads Extraction to Study the Influence of the Number of Feature Dimensions Kunkun Wu, Maosheng Hu, Zhong Xie	China University of Geosciences
16:30-16:45	GIS to CIM —— MapGIS Technological Innovation Wu Meng	Zondy Cyber Research

Friday 5 November 2021



分会场报告安排 Schedule of Sessions

Friday 5 November 2021, Beijing Time

Zoom ID: 784 198 7461

Friday 5 November 2021

Session 25-1: Geocomputation Chair: Huayi Wu

Time	Lectures	Institutes
13:30-13:45	Air Quality Modeling and Simulation at the Street-Level Hongquan Song, Haipeng Zhao, Tuanhui Wang, Youngseob Kim	Henan University
13:45-14:00	Extracting Trajectories of Earthworms Using Computer Vision Huili Jin, Xiang Li	East China Normal University
14:00-14:15	Dynamic Load Balancing Based on Parallel Geographic Cellular Automata Wei Xia	China University Of Geosciences
14:15-14:30	Aquifer Vulnerability and Groundwater Quality Assessment using Integrated Geospatial, Geophysical and Geochemical Approach Umair Khan, Bao-yi Zhang	Central south university
14:30-14:45	An Approach to Optimize the Locations of Electric Fences for Dockless Shared Bicycles Based on the Particle Swarm Optimization Min Cao, Shangjing Ma, Boqin Cai	State Key Laboratory Cultivation Base of Geographical Environment Evolution
15:00-15:30	Tea Break	

Session 25-2: Geocomputation Chair: Huayi Wu

15:30-15:45	Understanding Completeness and Diversity Patterns of OSM-Based Land-Use and Land-Cover Dataset in China ShuZhu Wang, Qi Zhou, YuanJian Tian	China University of Geosciences
15:45-16:00	Assessment of Groundwater potential sites by using GIS and Remote sensing intergrating with multi-criteria decision making technique Neema Simon Sumari, Calvin Samwel Swai, Paulo Julius Mandela	Sokoine University of Agriculture, Tanzania
16:00-16:15	Assessment of Residential Visual Exposure in High Density Residential Environments He Zheng, Bo Wu, Hui Lin	Jiangxi Normal University
16:15-16:30	Understanding Public Transport Supply and Demand from the Perspective of Public Transport Travel Ratio in A Fine Spatial Scale Ganmin Yin	Peking University
16:30-16:45	A modular and parallelized modeling framework for distributed watershed modeling and scenario analysis Liang-Jun Zhu ¹ , Junzhi Liu ² , Cheng-Zhi Qin ^{1*} , A-Xing Zhu ^{1,2,3}	1. Institute of Geographic Sciences and Natural Resources Research, CAS 2. Nanjing Normal University 3. University of Wisconsin Madison



分会场报告安排 Schedule of Sessions

Friday 5 November 2021, Beijing Time

Zoom ID: 890 422 4284

Session 26-1: Modeling Global Change and Sustainable Development Chairs: Yimin Chen and Xia Li

Time	Lectures	Institutes
13:30-13:45	Incorporating Spatio-Temporal Connectivity for Prioritized Conservation of Individual Habitat Patches in A Dynamic landscape Dianfeng Liu	Wuhan University
13:45-14:00	Deciphering the Evolution of China's Megaregions Shiliang Su	Wuhan University
14:00-14:15	Uneven Urban Expansion in Global Watersheds Qingxu Huang , Han Zhang	Beijing Normal University
14:15-14:30	How to Minimize the Impacts of Urban Expansion on Farmland Loss: Developing a Few Large or Many Small Cities Guohua Hu , Xia Li	East China Normal University
14:30-14:45	Urbanization Projections Under the Shared Socioeconomic Pathways Yimin Chen	Sun Yat-sen University
15:00-15:30	Tea Break	

Session 26-2: Modeling Global Change and Sustainable Development Chairs: Yimin Chen and Xia Li

15:30-15:45	Assessment on Ecological Services Using Trends of Net Primary Productivity: A Case Study of Shennongjia Forest Reserve Caiqun Wang, Sirui Yan, Xinshuang Wang, Zelin Xu, JingXiong, Zehua Wu, Ding Zhang, Hua Zhang, Xiaoliang Meng	Wuhan University
15:45-16:00	Monitoring and Evaluation Ecological Environment Quality Change Based on RSEI Model in Myanmar Section of the Golden Quadrangle Region in the border of China, Myanmar, Thailand and Laos Xingyun Zhang, Liang Hong	Yunnan Normal University
16:00-16:15	Urbanization Contribution to Human Perceived Temperature Changes in Major Urban Agglomerations of China Peng Wang, Ming Luo, Weilin Liao, Yong Xu, Sijia Wu, Xuelin Tong, Hao Tian, Feng Xu, Yu Han	Sun Yat-sen University

Friday 5 November 2021



分会场报告安排 Schedule of Sessions

Friday 5 November 2021, Beijing Time

Zoom ID: 816 025 7063

Friday 5 November 2021

Session 27: Remote Sensing for Coastal Sustainability

Chairs: Hongsheng Zhang Mingming Jia and Yiping Chen

Time	Lectures	Institutes
13:30-13:45	Retrieving Coastal Chlorophyll-A Concentration from Time-Series Remote Sensing Data Based on Machine Learning Hua Su	Fuzhou University
13:45-14:00	Spatial and Temporal Changes of Landscape Patterns in The Yellow River Delta During 30 Years Dong Li, Zhijun Jiao, Genyun Sun	China University of Petroleum
14:00-14:15	Identifying the Impacts of Urbanization on Mangroves: A Comparative Study in Southeast Asia Shan Wei, Hongsheng Zhang	The University of Hong Kong
14:15-14:30	Rapid, Robust, and Automated Mapping of Tidal Flats in China Using Time Series Sentinel-2 Images and Google Earth Engine Mingming Jia	Northeast Institute of Geography and Agroecology, CAS
15:00-15:30	Tea Break	
15:30-15:45	Fusing Optical and Polarimetric SAR Features for Urban Land-Use and Land-Cover Classification and Impervious Surface Extraction Yu Li	Beijing University of Technology
15:45-16:00	The Impacts of Clouds on Urban Land Cover Classification Using Optical and Radar Images Jing Ling, Yinyi Lin, Hongsheng Zhang	The University of Hong Kong
16:00-16:15	Detection of Individual Trees in Airborne LiDAR Point Clouds Using A Deep Learning Framework Based on Multi-Channel Representation Yiping Chen	Xiamen University



墙报展示 Schedule of Poster

Wednesday 3 November 2021, Beijing Time		Grand Ballroom (5th Floor)
Time	Sessions	Institute
17:00-18:00	Modeling Natural, Human and Host Factors for Echinococcosis Transmission at County Level in Western China Jie Yin, Xiaoxu Wu*, Chenlu Li, Jiatong Han, Hongxu Xiang	Beijing Normal University
	Environment and COVID-19 Incidence, and Human Adaptation: A Review Jiatong Han, Jie Yin, Xiaoxu Wu*, Danyang Wang, Chenlu Li	Beijing Normal University
	Spatiotemporal Changes of Coastal Wetland During 1985-2015 in Tianjin Binhai New Area Yi Gao, Jingming Hou, Zhiyuan Ren, Juncheng Wang, Xiaoyu Sun	National Marine Environmental Forecast Center
	The Spatio-temporal Analysis of Sea Ice and Snow in Nella Fjord , Antarctic based on the 36th National Antarctic Research Expedition in 2020 Xiaoyu Sun, Lv Tingting, LI Chunhua, ZHAO Fu, MAI Xiaoping	National Marine Environmental Forecasting Center
	Changes in the Coastline and a Reduction in Area of the Bohai Sea from 2000 to 2016 Xiaoyu Sun, Tingting Lv, Yi Gao	National Marine Environmental Forecasting Center
	Image Enhancement and Image Matching of UAV based on Histogram Equalization Wenfei Xi, Zhengtao Shi, Dongsheng Li, Lei Xia	Yunnan Normal University
	The Construction And Precision Analysis Of The Three - Dimensional Oblique Photogrammetry Model Wenfei Xi, Zhengrong Yang, Dongsheng Li, Shaojun Wang, Chunmei Li	Yunnan Normal University
	An Improved ViBe Algorithm Using Background Complexity Yu Wang, Yuanyuan Liu, Run Wang, Ni Yang, Wenjie Zhen, Haoyue Qian	China University of Geosciences
	Single-reflection Simulations of Soil Moisture Profiles for Signal of Opportunity at P band (SoOP) applications Xuanran Li, Wenxiao Ma, Xuerui Wu	Chifeng University
	Urban 3D Geological Modeling of Chengdu Hong Li, Deping Chu, Bo Wan, Guoxi Ma	China University of Geosciences

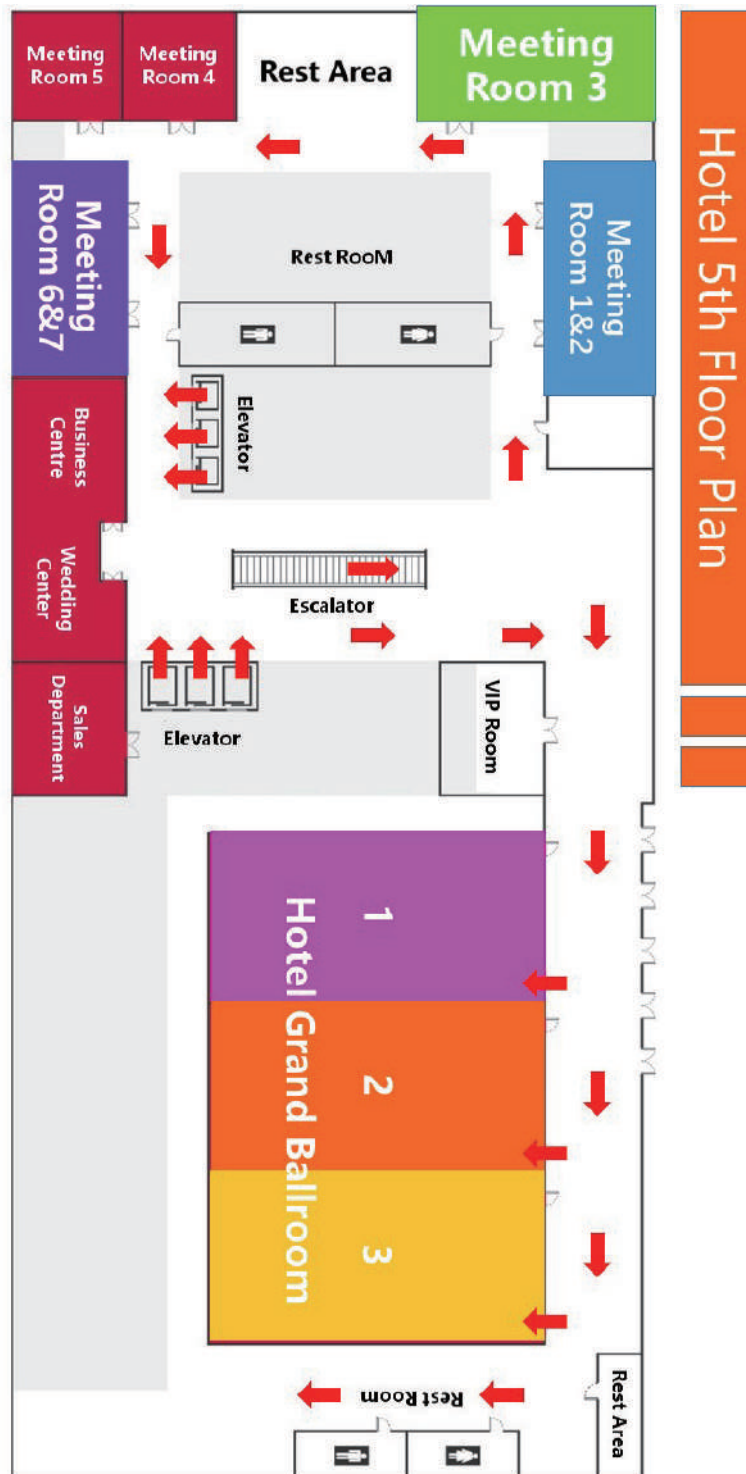


墙报展示 Schedule of Poster

Wednesday 3 November 2021, Beijing Time		Grand Ballroom (5th Floor)
Time	Sessions	Institute
17:00-18:00	Geological Entity Recognition Based on ELMOCNN-BiLSTM-CRF Model Chu Deping, Wan Bo, Li Hong, Fang Fang, Wang Run	China University of Geosciences
	Realtime Remote Sensing Image Publishing System Based on COG Technology Jing Yu, Hang Yang, Haotian Sun, Yuanmengqi Wang, Kun Chen, Yang Yu, Yu You	Chongqing Geomatics and Remote Sensing Center
	Research of Forest Fire Points Detection Method Based on MODIS Active Fire Product Jie Wang, Guanghui Wang, Jianwei Qi, Yu Liu, Wei Zhang	Land Satellite Remote Sensing Application Center
	A Conceptual Framework for Multi-Scale Representation of Geospatial Vector Data Zhenkai Yang, Huping Cui, Fei Yang	Information Engineering University
	The Subsidence Detection and Analysis Along Kunming Subway Network Based on SBAS-InSAR Bo Xiao, Junsan Zhao, Dongsheng Li, Wenfei Xi, Dingyi Zhou, Shuai Gao, Zhenfeng Zhao	Kunming University of Science and Technology
	How the Three Gorges Project (TGP) affects local precipitation Qin Li, Xiuguo Liu, Yulong Zhong, Mengmeng Wang, Manxing Shi	China University of Geosciences
	Spatio-Temporal Variability of PM2.5 Concentrations and Their Relationship with Impervious Surface Expansion in the Beijing-Tianjin-Hebei Region, China Guilin Wang, Gai Lu	Shanghai Urban Construction Vocational College
	Dynamic Monitoring of Cage Culture in Danjiangkou Reservoir Based on Domestic High Resolution Satellite Imagery Ke Liu, Yuhang Gan, Zhengyu Luo, Lina Dong	Land Satellite Remote Sensing Application Center
	Analysis of Major Tsunami Prevention Areas in Zhujiajian Island of China Jingming Hou, Yi Gao, Juncheng Wang, Wei Lu, Zhiyuan Ren	National Marine Environmental Forecasting Center
	A Multi-level Dynamic Database Model of Geological Disaster Emergency Remote Sensing Monitoring Dandan Zhang, Yingjuan Wei, Chenchao Xiao, Jianchao Wang	Land Satellite Remote Sensing Application Center
Land degradation monitoring using time series of multi-sensor data: A case study Jinquan Ai, Chunmei Niu, Jiangtao Zhu, Huangjing Li	East China University of Technology	



会场平面图 Conference Room Layout



微信公众号：CPGIS

大会官网：www.cpgis.org

大会网站：http://www.cpgis2021.com/

会议时间：2021年11月03日-05日

会议地点：江西省南昌市南昌绿地华邑酒店

会议形式：线上+线下交流

会议直播：支持Bilibili观看直播，直播链接请关注

CPGIS微信公众号



- 微信公众号 -



- 主会场直播二维码 -

交通指南

① 南昌昌北国际机场——酒店（约42公里）

1.大会设有定点班车，于11月2日11:00-21:00，约每隔1小时出发一趟

2.打车费用：预计全程49分钟，约100元

② 南昌西站——酒店（约27公里）

1.地铁路线（全程约62分钟）：2号线地铁站-南昌西出发，在地铁大厦站进行站内转乘1号线，于艾溪湖东站3号出口，步行约350米抵达

2.打车费用：预计全程43分钟，约100元

③ 南昌站——酒店（约11公里）

1.地铁路线（全程约38分钟）：南昌站步行256米，抵达2号线地铁站-南昌火车站2号口，在八一广场站进行站内转乘1号线，于艾溪湖东站3号出口，步行约350米抵达

2.打车费用：预计全程33分钟，约19元

会议服务联系方式

注册报到：刘慧榆 133 5821 6873

嘉宾接待：张秀秀 150 7919 6432

会场协调：郑焕春 188 5933 9887

大会总协调：高文熙 158 8044 1419

学术组联系：何清华 150 9609 9631

温馨提示

会议期间请佩戴胸卡进出会场及展厅

会场内严禁吸烟，请参会代表自觉遵守

请将随身垃圾带出会场，保持会场的整洁

会议期间请将手机置静音或关机状态，保持会场的安静

疫情防控

参会人员须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、有境外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。

