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SEG 中国

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SEG WORKSHOP

2023 SEG Integration of Geophysics,
Geology and Engineering Workshop

2023 SEG地球物理-地质-工程一体化技术研讨会

CHENGDU · CHINA

26-28 June 2023

Official Program 会议手册

Geology
Geophysics
Engineering





ONSITE INSTRUCTION

Onsite Registration

- Monday, 26 June, 09:00-18:00, Lobby on 1st Floor, Holiday Inn Chengdu Xindu, Chengdu, China
- Tuesday, 27 June, 07:00-17:00, Lobby on 1st Floor, Holiday Inn Chengdu Xindu, Chengdu, China
- Wednesday, 28 June, 07:00-17:00, Lobby on 1st Floor, Holiday Inn Chengdu Xindu, Chengdu, China

Brief Schedule

Oral & Poster sessions are held on the 4rd Floor of the Ball Hall in Holiday Inn Chengdu Xindu.

Date	Time	Sessions	Session Subject	Location
AM 27 June 2023	08:30-12:05	Session I	Opening Ceremony & Invited Speaker Session	Ball Hall
PM 27 June 2023	13:30-17:45	Session II	The application and development trend of geophysical technology in the integration of geology and engineering	
AM 28 June 2023	08:00-12:05	Session III	The application and development trend of geophysical technology in the integration of geology and engineering	
PM 28 June 2023	13:30-17:40	Session IV	Application and progress of geological engineering integration in oil and gas exploration	
27-Jun. 2023	15:45-16:05	Poster Session	Subjects: Cover all subjects of the workshop theme	
28-Jun. 2023	09:45-10:05			
	15:20-15:40			

Onsite Tips

- The dining place of buffet lunches & dinners is in iCafé of Holiday Inn Chengdu Xindu. Meal coupons will be required.
- All participants must wear the name badges to attend all the sessions.
- To respect the copyright of all the presentations, any forms of sound, camera or video recordings are not allowed during the sessions.



IMPORTANT CONTACT INFORMATION

Meeting Venue

- Ball Hall, Holiday Inn Chengdu Xindu
- Add: 280 Machao East Road, Xindu District, Chengdu
- Tel: 86-028-88885888

Recommended Hotel

- Holiday Inn Chengdu Xindu, Sichuan, China
- Add: 280 Machao East Road, Xindu District, Chengdu
- Contact: Ms. Liu
- Tel: 86-028-88885888

SEG Onsite Staff

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GENERAL CHAIR



Prof. Liehui Zhang

Liehui Zhang, doctoral supervisor, president of Southwest Petroleum University. In 1995, he received PhD degree in oil & gas field development engineering from Southwest Petroleum University. Prof. Zhang has been engaged in teaching and scientific research in seepage, well test and numerical simulation of complex oil & gas reservoirs for a long time. He has undertaken more than 30 projects at or above the provincial and ministerial level, such as National Science Foundation for Distinguished Young Scholars, the National "973 Program", the National Oil & Gas Science and Technology Project, and the Talent Support Program of the Ministry of Education. Prof. Zhang has won 2 second prize of Scientific and Technological Progress Award of national level, 5 first prizes and 2 second prizes of science and technology Progress of provincial level. Prof. Zhang has published more than 190 academic papers with more than 100 SCI and EI papers, 6 Teaching Materials and Monographs, 2 invention patents.

Prof. Zhang is the Changjiang Scholar Chair Professor and leader of Changjiang Scholar Innovation Research Team, the Academic and Technical leaders of Sichuan Province. He was awarded the Research Award Fund for Outstanding Young Teachers in Higher Education Institutions (former Program for New Century Excellent Talents in University of Ministry of Education of China), Sun Yueqi Youth Science and technology award, Fok Ying-Tong Award for young teachers, Sichuan Province Youth Science and Technology Award, Excellent experts with outstanding contributions of Sichuan Province. He is the editor of Hydrodynamics, Special Oil and Gas Reservoirs, Petroleum Geology & Oilfield Development in Daqing, Reservoir Evaluation and Development, Gas Reservoirs and Natural Gas Industry.



EXECUTIVE CHAIR



Prof. Xuri Huang

Xuri Huang, doctoral supervisor, the Dean of the School of Geoscience and Technology, Southwest Petroleum University, Executive Director of SEG China (Society of Exploration Geophysicists). Prof. Huang is national expert, Sichuan province expert, Chengdu "Rongpiao Plan" expert. He is a member of the Subject Evaluation Group of the 8th Academic Degree Committee of the State Council, member of the editorial committee of Oil Geophysical Prospecting, member of the Doctoral Examination Committee of Heriot-Watt University in Scotland.

Prof. Huang has long been engaged in interdisciplinary research on geophysical and reservoir engineering integration methods and technologies. He was SPE Distinguished Lecturer (2009-2010), SEG Honorary Lecturer (2014), SPG Excellent Lecturer 2016. He has been awarded 4 provincial and ministerial awards, with 12 invention patents and 31 software Copyrights authorized. He has published more than 100 papers in journals such as "Earth Science Frontier", "Interpretation" and international academic conferences, and participated in 2 monographs.

INVITED PRESENTATION 6

Title: Geophysical imaging, multi-scale characterization and reservoir integration technology

Time: 11:15-11:40am, 27 June 2023

TECHNICAL CO-CHAIRS



Prof. Weiping Cao

Weiping Cao, is a professor of geophysics in Southwest Petroleum University, Chengdu, China. He received his Ph. D in geophysics from the University of Utah in US in 2009. Since then he worked as a research scientist in oil companies and service companies including Chevron, BP, Halliburton and Spectrum/TGS. His experience focused on research and development of novel algorithms for seismic data processing and imaging. In 2019 he joined Southwest Petroleum University in China as a professor. Weiping Cao's research interest include seismic signal processing, seismic imaging, and engineering geophysics.



Prof. Mingcai Hou

Mingcai Hou, received bachelor degree from East China University of Technology in 1992, master degree (2000) and PhD (2003) from Chengdu University of Technology. Dr. Hou has been teaching in Chengdu University of Technology since July 2003, and serving successively as the Dean Assistant of School of Earth Sciences, Dean Assistant, Deputy Dean and Dean of Research Institute of Sedimentary Geology, and Dean of Graduate School. 2003.5~2005.12, Dr. Hou had been working at the Post-doctoral Station of Geological Resources and Geological Engineering, Chengdu University of Technology. In 2009, Dr. Hou was an invited visiting professor at the Institute of Geology and Paleontology, University of Lausanne, Switzerland. Prof. Hou has been member of CPC Standing Committee and Vice President of Chengdu University of Technology since November 2020.

Prof. Hou is mainly engaged in the research and teaching of deep sedimentology and paleogeographic reconstruction, and the research of deep and ultra-deep oil & gas exploration. He has presided over nearly 100 national science and Technology major projects, national 973, National Natural Science Foundation of China, National Geological Survey projects and enterprise cooperation projects. Prof. Hou has 188 papers published, including 36 SCI, 32 EI and 95 CSCD papers, and he has published 3 monographs.



Prof. Guangmin Hu

Guangmin Hu, professor, doctoral supervisor, winner of Education Ministry's New Century Excellent Talents Supporting Plan, an excellent expert with outstanding contributions in Sichuan Province. He graduated from the Computer Science Department of the Nanjing University in 1986. He received his M.S. and Ph.D. degrees from Chengdu University of Technology in 1992 and 2000, respectively. From 2000 to 2003, he did postdoctoral research at the University of Electronic Science and Technology of China. From 2002 to 2003, he was a visiting scholar at Hong Kong Polytechnic University.

His main research directions include complex multi-dimensional information processing, oil and gas exploration information processing, etc. As the project leader, he has undertaken more than 50 scientific research projects, including key projects of the Natural Science Foundation, major national special projects, innovation special zone projects of the Science and Technology Commission of the Military Commission and various Horizontal subjects, etc. He has won the third prize of the National Science and Technology Progress Award once and the second prize of the Ministry of Science and Technology Progress twice. He has published more than 80 papers, of which more than 70 have been indexed by SCI or EI.

INVITED PRESENTATION 3

Title: Research progress of geological modeling technology guided by prior knowledge

Time: 09:35-10:00am, 27 June 2023



Prof. Weijian Mao

Weijian Mao received the Ph.D. degree in Geophysics from University of Trieste, Italy in 1989. He was a postdoctoral fellow in the ICTP in Trieste from 1989 to 1991, and then went to University of Leeds, UK for a senior research geophysicist until 1997. He worked for R&D of WesternGeco, Schlumberger in London and Houston as a principal research scientist from 1997 to 2012. Now he is a Professor of Innovation Academy for Precision Measurement Science and Technology, Chinese Academy of Sciences. Professor Mao's research interests are in new methods for seismic data processing, modeling, migration and inversion.



Ms. Furong Wu

Furong Wu, Senior Principal Engineer, expert of Southwest Geophysical Research Institute, BGP, CNPC. She is committed to the research and application of mountain seismic exploration technology for more than 30 years, successively undertaken and completed 13 scientific and technological projects at the provincial and ministerial level, won 1 second prize of National Technical Invention, 8 provincial and ministerial level scientific and technological Progress awards, authorized 10 National Invention patents, published 40 papers. Wu was awarded the 16th "Sun Yueqi Youth Science and Technology Award (2007)", Special Government Allowance of The State Council (2015), national candidate of "Millions of Talents Project" and awarded the honorary title of "Middle-aged and Young Experts with Outstanding Contributions" (2017).

INVITED PRESENTATION 4

Title: Integrated application of seismic and geological engineering of shale gas in southern Sichuan Basin

Time: 10:25-10:50am, 27 June 2023



Prof. Yibo Wang

Yibo Wang is a professor at the Institute of Geology and Geophysics, Chinese Academy of Sciences. He is a recipient of the National Science Fund for Distinguished Young Scholars, and the chief scientist of National Key R&D Program. He was a researcher at University of Utah, Saudi Aramco, BP America Inc. and Peking University. His current research direction is exploration and reservoir geophysics. He is an associate editor of the Chinese journal of geophysics and serves as the director of the Committee of Young Geophysicists, Chinese Geophysical Society. He also serves as the vice chairman of the Chinese National Commission, Young Earth Scientists Network. He was an editorial board member of the Acta Geodynamica et Geomaterialia, and an education committee member of the European Association of Geoscientists and Engineers.

INVITED PRESENTATION 5

Title: Monitoring Hydraulic Fracturing in Unconventional Reservoirs using Fiber-Optic Distributed Acoustic Sensing

Time: 10:50-11:15am, 27 June 2023



Prof. Huai Zhang

Huai Zhang is a professor and doctoral supervisor of the University of Chinese Academy of Sciences, recipient of the National Fund for Distinguished Young Scholars. He received his Ph. D. degree from Institute of Mathematics, Chinese Academy of Sciences in 2000. In 2002, he joined the Chinese Academy of Sciences Graduate School (formerly the University of Chinese Academy of Sciences), where he has been engaged in interdisciplinary and innovative research in the field of geodynamics, and have successfully developed the first independent parallel finite element program automatic generation system in our country and deployed it to solve many geodynamics problems. He is now the director of the Key Laboratory of Computational Geodynamics, Chinese Academy of Sciences, vice chairman of the Geodynamics Committee of the Chinese Society of Mechanics, and a member of the Board of directors of the ninth and eleventh sessions of the Chinese Mechanics Society.

TECHNICAL COMMITTEE MEMBERS

(NAMED IN ALPHABET ORDER OF LAST NAME)

Hanpeng Cai, University of Electronic Science and Technology of China (UESTC)

Guo Chen, CNPC Chuanqing Drilling Engineering Company Limited

Yongbo Diao, Southwest Geophysical Research Institute, BGP, CNPC

Zhaoqi Gao, Xi'an Jiaotong University

Fei Gong, China University of Mining & Technology, Beijing

Chong Han, CNPC Chuanqing Drilling Engineering Company Limited

Shanzheng Hu, Southwest Geophysical Branch, BGP, CNPC

Hong Liang, Southwest Geophysical Research Institute, BGP, CNPC

Minghua Ouyang, CNPC Chuanqing Drilling Engineering Company Limited

Shulin Pan, Southwest Petroleum University

Jing Tang, Southwest Petroleum University

Zhiguo Wang, Xi'an Jiaotong University

Yukai Wo, Southwest Petroleum University

Dakui Wu, CNPC Chuanqing Drilling Engineering Company Limited

Jianyong Xie, Chengdu University of Technology

Xiao Yang, Southwest Geophysical Research Institute, BGP, CNPC

Dianguang Zang, Southwest Geophysical Research Institute, BGP, CNPC

Qingchen Zhang, Innovation Academy for Precision Measurement Science and Technology, CAS

Xiaobin Zhang, Southwest Geophysical Branch, BGP, CNPC

INVITED PRESENTATION

INTERNATIONAL INVITED PRESENTATION 1

Title: Super-resolution inversion and multi-dimensional characterization techniques for seismic wave detection of tight oil and gas

Time: 08:45-09:10am, 27 June 2023

Speaker: Jinghuai Gao, Xi 'an Jiaotong University

Speaker Biography



Jinghuai Gao, doctoral supervisor, deputy dean of Xi 'an International Academy for Mathematics and Mathematical Technology of Xi 'an Jiaotong University; Chief scientist of Major Project of National Natural Science Foundation; Director of Seismic Wave Signal Analysis Sub-center of National Engineering Research Center of Offshore Oil and Gas Exploration. He has been committed to the research and teaching of basic theories and methods of oil and gas exploration geophysics for a long time.

He is the proposer and completer of the superresolution inversion of non-stationary seismic data and the multi-dimensional characterization of phase space in China. It mainly focuses on the basic theory innovation of unconventional oil and gas exploration and development, breakthrough bottleneck of key technology research and development. It is the first in the world to put forward the governing equation of wave in dense oil and gas medium, which lays a theoretical foundation for the exploration and development of this kind of oil and gas reservoir, and has been popularized and applied in onshore, offshore and overseas oil and gas exploration. He has presided over or undertaken more than 40 scientific research projects such as " Research on the basic theory and method of geophysics for unconventional oil and gas exploration and development " under the National Natural Science Foundation, and Geoscience integration Project under the Major Research Program of the National Natural Science Foundation. He has published 243 high-level papers, 45 authorized invention patents and 4 US patents. He won the first Prize in Science and Technology of the Ministry of Education, the CSIAM(China Society for Industrial and Applied Mathematics) Wu Wen-Tsün Applied Mathematics Prize. He is Awarded special government allowance by The State Council. He is the Principal Scientist of "Gao-lab for oil and gas exploration geophysics ", Xi 'an Jiaotong University leading scholar. He is associate editor of IEEE TGRS and editorial board member of Geophysical Journal.



INTERNATIONAL INVITED PRESENTATION 2

Title: Integration technology and application of seismic and geological engineering based on optical fiber

Time: 09:10-09:35am, 27 June 2023

Speaker: Gang Yu, BGP

Speaker Biography



Gang Yu is the Senior Technical Director of BGP's Optical Science & Technology Division and Senior Technical Advisor to the President of BGP. Providing technical support to BGP's Optical Science & Technology Division and Non-Seismic Division. He provides technical advice to projects of microseismic monitoring of hydraulic fracturing operation, distributed acoustic sensing (DAS) VSP survey and 3D VSP imaging, integrated shale gas reservoir characterization, marine MMT and CSEM, land MT and TFEM, borehole-to-surface TFEM, etc.

Dr. Gang Yu holds a B.Sc. (Exploration Geophysics) and a M.Sc. (Geophysical Instrumentation) from Chengdu University of Technology of China, and a Ph.D. (Applied Geophysics) from Macquarie University of Australia. He is an active member of the Society of Exploration Geophysicists (SEG), the European Association of Geoscientists and Engineers (EAGE), and Society of Petrophysicists and Well Log Analysts (SPWLA).

Dr. Gang Yu has more than 35 years of international experience of geophysics, petrophysics, marine MT and CSEM, borehole seismic and logging services for the petroleum applications, environment, groundwater and mining industry. He lead, coordinated and participated in many advanced geophysical R&D projects, and also have demonstrated excellent organizational, operational, business development, marketing, communication and problem-solving skills.

INTERNATIONAL INVITED PRESENTATION 7

Title: Research and application of WFEM in oil and gas field

Time: 11:40-12:05pm, 27 June 2023

Speaker: Diqian Li, Central South University

Speaker Biography



Diqian Li is a professor and doctoral supervisor at the School of Earth Sciences and Information Physics, Central South University. He is also the Deputy Director of the Department of Applied Geophysics at the School of Geosciences and Information Physics, Central South University and the Deputy Director of the Key Laboratory of Metallogenic Prediction and Geoenvironmental Detection of Nonferrous Metals, Ministry of Education. He is the technical director of Hunan Geosun High-Tech Co., Ltd.

Professor. Li has achieved remarkable results in science and technology, including winning the first prize of Chinese nonferrous metal industry science and technology invention in 2014, the first prize of Hunan Science and Technology Progress in 2016, and the first prize of National Technology Invention in 2018. He was also selected for the Hunan Provincial Program for Young and Middle-aged Academic Leaders in 2019, awarded the 11th "Hunan Youth Science and Technology Award" in 2021, and won the 17th China Youth Science and Technology Award in 2022.



INTERNATIONAL INVITED PRESENTATION 8

Title: Key technologies for seismic and geological engineering integration in low-permeability tight oil reservoirs

Time: 13:30-13:55pm, 27 June 2023

Speaker: Haojie Liu, Research Institute of Exploration and Development, Sinopec Shengli Oilfield

Speaker Biography



Haojie Liu, PhD, Researcher is a senior expert in geophysics of oil reservoirs at the Shengli Oilfield of Sinopec in China. He also serves as the Deputy Dean of the Geophysical Research Institute. He holds academic positions as a Director of the China Industrial and Applied Mathematics Society and a part-time Master's supervisor at China University of Petroleum (East China) and Ocean University of China. Dr. Liu completed his doctoral studies at the Institute of Acoustics, Chinese Academy of Sciences in 2005. He has won honors and titles such as "Outstanding Postdoctoral Fellow of Shandong Province" and the "China Petrochemical Corporation Min Enze Young Science and Technology Talent Award." He has been engaged in long-term research work in geophysical technology for oil reservoirs. As a project leader and technical chief, he has undertaken more than 10 projects, including the National 863 Program, Sinopec projects, and Postdoctoral Foundation projects. He has received five provincial and ministerial-level scientific and technological advancement awards, published over 20 papers and authored one specialized publication. His research areas include seismic rock physics, seismic reservoir characterization, integration of seismic geological engineering, integrated interpretation and modeling, artificial intelligence, etc.

TECHNOLOGY SHOWCASE

SLB

Wednesday, 28 June, 2023

Ball Hall Holiday Inn Chengdu Xindu

09:25-09:45..... **Geophysics to Geo engineering integrated applications in Unconventional Oil & Gas**
(Chunduan Zhao, Jiao He, SLB Digital & Integration)

SLB is a global technology company that drives energy innovation for a balanced planet. With a global footprint in more than 100 countries and employees representing almost twice as many nationalities, they work each day to decarbonize oil and gas and develop scalable new energy technologies to accelerate the energy transition.





MEETING SCHEDULE

Onsite Registration Holiday Inn Chengdu Xindu

26 June, 2023	09:00-18:00	Onsite Registration
	16:00-16:30	Session Chair Meeting
27 June, 2023	07:00-17:00	Onsite Registration
28 June, 2023	07:00-17:00	Onsite Registration

27 June, 2023 Tuesday

Location: Ball Room

Session 1: Opening Ceremony & Invited Speaker

Session Chair: Xiaotao Wen, Tao Wen

Time	Title	Speaker
08:30-08:35	Opening Speech by SEG Representative	Arthur Cheng
08:35-08:40	Opening Speech by representative of Southwest Petroleum University	TBD
08:40-08:45	Opening Speech by representative of the technical committee co-chairs	Xiaotao Wen
08:45-09:10	Invited Speaker 1: Super-resolution inversion and multi-dimensional characterization techniques for seismic wave detection of tight oil and gas	Jinghuai Gao
09:10-09:35	Invited Speaker 2: Integration technology and application of seismic and geological engineering based on optical fiber	Gang Yu
09:35-10:00	Invited Speaker 3: Research progress of geological modeling technology guided by prior knowledge	Guangmin Hu
10:00-10:25	Coffee Break	
10:25-10:50	Invited Speaker 4 : Integrated application of seismic and geological engineering of shale gas in southern Sichuan Basin	Furong Wu
10:50-11:15	Invited Speaker 5: Monitoring Hydraulic Fracturing in Unconventional Reservoirs using Fiber-Optic Distributed Acoustic Sensing	Yibo Wang
11:15-11:40	Invited Speaker 6: Geophysical imaging, multi-scale characterization and reservoir integration technology	Xuri Huang
11:40-12:05	Invited Speaker 7: Research and application of WFEM in oil and gas field	Diqian Li
12:05-13:00	Lunch	

27 June 2023 Tuesday

Location: Ball Hall

Session 2: The application and development trend of geophysical technology in the integration of geology and engineering

Session Chair: Xiao Yang, Zhiguo Wang

Time	Title	Speaker
13:30-13:55	Invited Speaker 8: Key technologies for seismic and geological engineering integration in low-permeability tight oil reservoirs	Haojie Liu, Research Institute of Exploration and Development, Sinopec Shengli Oilfield
13:55-14:20	Keynote Speaker 1: The application of azimuthal anisotropy inversion in fracture prediction	Qihu Jin*, Zhengxin Yao, Xuefeng Wang, Congwei Liu, Fei Li. BGP, CNPC
14:20-14:45	Keynote Speaker 2: Updating migrated seismic images using well-seismic mistie	Li Mengcheng*, Cao Weiping ¹ , Huang Xuri ¹ , Xu Minghua ² 1. School of Geoscience and Technology, Southwest Petroleum University; 2. Research Institute of Geological Exploration and Development, CNPC Chuanqing Drilling Engineering Co., Ltd., Chengdu
14:45-15:05	Key technology of seismic prediction in favorable exploration area of Ordovician Karst weathering crust gas reservoir in Sulige gas field	Han Chong ¹ , Chen Mingjiang ¹ , Peng Yu ¹ 1. Research Institute of Geological Exploration and Development, CNPC Chuanqing Drilling Engineering Co., Ltd., Chengdu
15:05-15:25	Integrated Fracture detecting methods in the horizontal well	Leifei Wang, Changchun Liu, Jie Li, Wenting Yang, PetroChina Changqing Oilfield Company; Bo Liu, Xunqi Liu, Shenzhuan Li, Fangfang Wu, Qingzhi Lu, Fujian Ma, Schlumberger China
15:25-15:45	Oil-bearing prediction technology based on well-electro-seismic fusion	Jia Huang, Oil and Gas Research Institute of Hunan Geosun High-Technology Co., LTD
15:45-16:05	Break & Poster Session	
16:05-16:25	Calculation example of brittleness index of tight conglomerate based on prestack seismic inversion	Chen Yaojie*, Pan Shulin ¹ , School of Geosciences and Technology, Southwest Petroleum University
16:25-16:45	5D Prestack Data Regulation And Its Application For Footprint Suppression	Feng Xinyuan*, Liu Huan ¹ , Liu Weiming ¹ , Liu Jie ¹ 1. Research Institute of Petroleum Exploration & Development -Northwest (NWGI), PetroChina



16:45-17:05	Bundled 3D-VSP imaging processing and application of converted shear wave	Yuanyuan Yan ^{*1} , Qi Ran ¹ , Li Qin ² , Cheng Lei ¹ , 1. Exploration and Development Research Institute, PetroChina Southwest Oil & Gasfield Company; 2. BGP, Chengdu
17:05-17:25	Characterization for the carbonate-karst reservoir based on target-oriented full-waveform inversion	Kai Li ^{*1} , Xuri Huang ¹ , Yezheng Hu ¹ , Jing Tang ¹ , Wen Xiao ² 1. School of Geosciences and Technology, Southwest Petroleum University; 2. Institute of Tarim Oilfield Company, PetroChina
17:25-17:45	Application and Cognition of long stage multi-cluster fracturing technology on shale gas	Cai Molun ¹ , Hu Zhou ² , Cao Yinping ¹ 1. Research Institute of Geological Exploration and Development, CNPC Chuanqing Drilling Engineering Co., Ltd., Chengdu.; 2. Shale Gas E&D Project Department, CNPC Chuanqing Drilling Engineering Co., Ltd.

28 June 2023 Wednesday		
Location: Ball Hall Session 3: The application and development trend of geophysical technology in the integration of geology and engineering Session Chair: Dianguang Zang, Guangmin Hu		
Time	Title	Speaker
08:00-08:25	Keynote Speaker 3: Research and application of fracture toughness quantitative prediction of shale	Kaiyuan Liu, Xiaojiang Deng, Furong Wu, Xiaolan Wang, Qi He, Yuanyuan Chen, Lili Chen, Dongshan Huang. Southwest Institute of Geophysical Exploration BGP INC., CNPC. Chengdu
08:25-08:45	Multi-scale Staging Characterization Method for Fractures in Longmaxi Formation Shale Reservoirs	Xiaohui Huang ^{1*} , Lei Wu ¹ , Yumeng Jiang ¹ , Jiexin Li ¹ , Zhou Hu ¹ , Zhaoxing Wang ¹ , Guanyu Zhang ² , Xuri Huang ² , Yungui Xu ² 1. CNPC Chuanqing drilling engineering company, Chengdu 2. School of Geoscience and Technology, Southwest Petroleum University, Chengdu
08:45-09:05	Inversion of surface wave dispersion curve based on deep learning	Yinghe Wu [*] , Shulin Pan, Southwest Petroleum University
09:05-09:25	3D seismic prediction of favorable areas for CBM	Li Tao ^{*1} , Wang Tianyun ^{1,2} , Zhang Wei ¹ , Li Jianing ¹ , Sun Xiaoping ¹ , Ding Qingxiang ¹ 1. BGP, CNPC., Zhuozhou, Hebei; 2. Institute of Sedimentary Geology, Chengdu University of Technology
09:25-09:45	Technical Showcase - Geophysics to Geo engineering integrated applications in Unconventional Oil & Gas	Chunduan Zhao, Jiao He, SLB Digital & Integration
09:45-10:05	Break & Poster Session	
10:05-10:25	A new technology of paleogeomorphic restoration in denger member karst period in Gaoshiti area, Sichuan Basin	Xiaohui Zhao, Chuanhang He, Jinbo Le, Jingyu Chen, Xiaoxiao Fan, Qiaoyi Zhang, BGP, ZhuoZhou
10:25-10:45	A Novel Triple Porosity Model for Calculating Porosity Exponent of Fractured-Vuggy Reservoirs	Jie Tian ^{*1} , Hongqi Liu ^{*1} , Liang Wang ² , Liqiang SiMa 1. Southwest Petroleum University; 2. Chengdu University of Technology



10:45-11:05	Research on well location optimization of carbonate gas reservoir assisted by machine learning method	Luo Yong ^{*1,2} , Fan Jinren ² , Gao Zhibin ² , Wen Guangyao ³ 1. State Key Laboratory of oil and gas reservoir geology and development engineering, Southwest Petroleum University, Chengdu; 2. Research Institute of Geological Exploration and Development, CNPC Chuanqing Drilling Engineering Co., Ltd., Chengdu; 3. PetroChina international exploration and Development Co., Ltd., Beijing
11:05-11:25	Logging permeability calculation method based on Stratigraphic Imaging	Bei Yang*, Yijia Wu, Maolin Xiao, Yongcheng Mu. Research Institute of Geological Exploration and Development, CNPC Chuanqing Drilling Engineering Co., Ltd., Chengdu
11:25-11:45	Application and effect of geophysical drilling tracking technology in geology-engineering integration of shale wells	Li Yangjing ^{1*} , Wang Xiaolan ¹ , Tan Rongbiao ¹ , Li He ¹ , Guo Yuchen ¹ , Zeng Zhen ¹ , Zhang Ruyue ¹ , Southwest Geophysical Research Institute, BGP Inc, CNPC
11:45-12:05	Key geophysical technologies and applications of continental shale oil and gas in Sichuan Basin	Yu Wang, Zhengliang Lin, Huafeng Hu, Shan Zhou, Kai Xu Sinopec Petroleum Geophysical Exploration Technology Research Institute Co., LTD

28 June 2023 Wednesday

Location: Ball Hall

Session 4: Application and progress of geological engineering integration in oil and gas exploration

Session Chair: Gang Yu, Huai Zhang

Time	Title	Speaker
13:30-13:55	Keynote Speaker 4: From the Sichuan Basin to the Oman Basin: the geology and geophysics evidence of Cambrian-Silurian tectono-depositional differential	Xiao LIANG ^{1,2*} , Jie CHEN ¹ , Wen-xin MA ¹ 1. Research Institute of Geological Exploration and Development, CNPC Chuanqing Drilling Engineering Co., Ltd., Chengdu; 2. State Key Laboratory of Oil and Gas Reservoir Geology and Exploitation, Chengdu University of Technology, Chengdu
13:55-14:20	Keynote Speaker 5: Seismic response model and identification technology of deep carbonate reservoirs in Dengying Formation of Sichuan Basin	Guany Zhang ^{1*} Xuri Huang ¹ Yungui Xu ¹ Kang Chen ² Da Peng ² 1. School of Geoscience and Technology, Southwest Petroleum University, Chengdu 2. Exploration and Development Research Institute, PetroChina Southwest Oil & Gasfield Company, Chengdu
14:20-14:40	Application of 3d seismic shale oil horizontal well optimization deployment and trajectory guidance technology in Qingcheng Oilfield	Zhang Jie ^{*1,2} , Li Fei ¹ , Yao Zonghui ¹ , Zeng Yali ¹ , Yang Chao ¹ , Long Shengfang ¹ , Gao Nan ¹ 1. Research Institute of Exploration and Development, Changqing Oilfield Company, PetroChina; 2. National Engineering Laboratory for Low-permeability Oil/Gas Exploration and Development
14:40-15:00	Application of the integration of seismic, geology and engineering in shale oil E&P	Jinling Du ¹ , Jixiang He ² , He Li ¹ , Fang Zhang ² , Wenli Xu ¹ 1. BGP, CNPC; 2. Xinjiang Oilfield Company, PetroChina
15:00-15:20	Study on in-situ stress prediction 3.0 in Geological Engineering Integration	Jianli Yang, Chunyu Liu*, Weijia Fan, Yuanyuan Xu, Elsiwave Reservoir
15:20-15:40	Break & Poster Session	



15:40-16:00	Integrated Detection and Prediction of Fractures in Carbonate Rock Reservoirs	Hong Yugang*, Lu lize, Wang Hehua, Mi Zhongrong, Yang Tao, ADNOC&China Zhenhua Oil Co., Ltd, Chengdu Research Center
16:00-16:20	Research and application of seismic prediction technology for Chang 7 shale oil in Ordos Basin	ZENG Yali* ¹ , HUANG Ligang ¹ , YANG Chao ¹ , LONG Shengfang ¹ , Research Institute of Exploration and Development, Changqing Oilfield Company, PetroChina
16:20-16:40	Analysis of crude oil in M gas field, right bank of Amu Darya River, Turkmenistan	Jiang Linwei ¹ , Xue Taofeng ¹ , Zhang Li ¹ 1. CNPC Chuanqing Drilling Engineering Company Limited
16:40-17:00	The technology of well-side structure recovery while drilling based on mud logging data -Taking Well W2 as an example	Chen Dan ¹ , Yin Ping ¹ , Zhu Liang ² , Zhang Lei ¹ , Li Jinrong ¹ 1. Research Institute of Geological Exploration and Development, CNPC Chuanqing Drilling Engineering Co., Ltd., Chengdu; 2. Chuanqing Drilling International Engineering Company
17:00-17:20	Stability analysis of salt structure drilling and its application in Keshen 10 Block of Kuqa Depression	Mingwen Wang ¹ , Gang Luo* ¹ , Chaowei Chen ² , Chao Fang ² 1. School of Geodesy and Geomatics, Wuhan University; 2. CNPC Engineering Technology R&D Company Limited, Beijing
17:20-17:40	CLOSING CEREMONY	

Poster Session

Session Chair: Yibo Wang, Huai Zhang
15:45-16:05, Tuesday, 27 June 2023

Time	e-Screen	No.	Title	Author
15:45-15:50	1#	P001	Reservoir detection method based on two-dimensional variational modal decomposition and generalized S-transform	Leiyu Qiu*, Xuehua Chen, Jie Zhang, Xiaopeng Niu, State Key Laboratory of oil and gas reservoir geology and development engineering, Chengdu University of Technology
15:50-15:55	1#	P002	Evaluation of hydraulic fracturing effect of Zhaotong shale gas by using microseismic borehole monitoring technology	Fangdong Chu ^{1,2} , Xing Liang ³ , Yunwei Bu ³ , Tingbin Sun ¹ , Tengjiao Liu ^{1,2} , Chao Feng ^{1,2} 1. BGP INC., China National Petroleum Corporation; 2. Optical Science and Technology (Chengdu) Ltd.; 3. PetroChina Zhejiang Oilfield Company
15:55-16:00	1#	P003	A High-resolution Attenuation Attribute Extraction Method for Pre-stack Gather	Bo Li* ^{1,2} , Xiaotao Wen ^{1,2} , Chao Tang ^{1,2} , Lei Li ^{1,2} 1. College of Geophysics, Chengdu University of Technology; 2. State Key Laboratory of Oil and Gas Reservoir Geology and Exploitation
16:00-16:05	1#	P004	Intelligent long-term microseismic monitoring technology based on sparse nodes	Zizheng Li, Haibo Zhu, Yu Wang, Sinopec Petroleum Geophysical Exploration Technology Research Institute Co., LTD
15:45-15:50	2#	P005	Prediction of casing deformation in shale gas horizontal wells by geophysical technology	Sijin He* ¹ , Rong Zeng ² , Bao Li ¹ , Xiaojing Zhou ³ 1. Southwest Institute of Geophysical Exploration, BGP INC., CNPC, CNPC; 2. Southwest Oil & Gasfield Inc., CNPC; 3. Chuanqing Drilling Engineering Company Limited Inc., CNPC
15:50-15:55	2#	P006	L1/2 norm based sparse reflectivity inversion for nonstationary seismic data	Zhiliang KANG, Ying GUO, Mengdi CUI, Yunying KANG, Jian BAI, Longyan JIANG, Jin SHEN, Lin XIAO, Xiaxia JIN Exploration and Development Research Institute of North China Branch Company, SINOPEC
15:55-16:00	2#	P007	Research and application of integrated technology of tight sandstone gas acquisition processing and interpretation	Huahui Zeng ^{1*} , Guangguang Yang ² , Song Han ² , Huan Liu ¹ , Huijie Meng ¹ 1. Research Institute of Petroleum Exploration & Development-Northwest (NWGI), PetroChina; 2. Research Institute of Petroleum Exploration and Development, Southwest Oil & Gas Field Company PetroChina



16:00-16:05	2#	P008	DTS data process method for horizontal well profile monitoring	Xiaohui Yang, Zhengliang Lin, Xinchao Yang, Zhanguo Chen, Shan Zhou, Sinopec Petroleum Geophysical Exploration Technology Research Institute Co., LTD
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Session Chair: Shulin Pan
09:45-10:05, Wednesday, 28 June 2023

09:45-09:50	1 #	P009	The application of geosteering while drilling technique of highly deviated wells in deep complex thrust fold belt in shuangyushi gas field of Longmenshan Piedmont belt in Northwest Sichuan Basin	Duan Jie ^{1*} , Liu Shumin ¹ , Li Yuyao ¹ , Wu Bowen ¹ , Zheng Hong ¹ , Deng Shaoqiang ¹ 1. Southwest Institute of Geophysical Exploration BGP CNPC, Chengdu
09:50-09:55	1 #	P010	Advances and applications of the CQ-GRI automatic Mud logging interpretation system	Lei Zhao ^{1,2} , Jin-Rong Li ¹ , Ping Yin ¹ , Rong-Hui Yan ³ , Yin Lei ⁴ , Xie Tang ¹ , Cong Ruan ¹ , Xiao Liang ¹ , Bo Li ¹ 1 CCDC, geological exploration and development research institute, chuanqing drilling engineering co., ltd, CNPC. 2 State Key Laboratory of Oil and Gas Reservoir Geology and Exploitation Engineering, Chengdu University of Technology 3 Engineering and Technology Management Division, Changqing Oilfield Branch, PetroChina 4 Engineering Technology Research Institute of Southwest Oil and Gas Filed Company
09:55-10:00	1 #	P011	Research on Formation Mechanism of Normal Faults in Zhaotong Area, Changning, Sichuan Basin	Zhou Shiyu ^{1*} , Jiang Bo ¹ , Huang Yu ² , Zhang Huaiming ¹ 1. Southwest Geophysical Research Institute, BGP, CNPC; 2. Southwest Geophysical Branch, BGP, CNPC
09:45-09:50	2 #	P012	Seismic data processing technology and application of tight gas reservoir in Jinhua-Qiulin area, central Sichuan	Chenglong Xian, Yan Xiong, Yong Xiao, Xiong Zhang, Ming Xia, Research Institute of BGP
09:50-09:55	2 #	P013	Study on characteristics of strike-slip faults in CN area of Sichuan Basin	Li Ruining ¹ , Huang Lijuan ¹ , Zhang Huaiming ² 1. Southwest Geophysical Research Institute, BGP, CNPC. 2. Southwest Geophysical Branch, BGP, CNPC
09:55-10:00	2#	P014	Analysis on Seismic Response Characteristics of Ultra Deep Carbonate Fault Controlled Reservoir in Shunbei Area of Tarim Basin	Wei Gong [*] , Xiaotao Wen, Chengdu University of Technology

Session Chair: Shulin Pan
15:20-15:40, Wednesday, 28 June 2023

15:20-15:25	1 #	P015	Study on fracture prediction of coalbed methane reservoir based on prestack OVG gathers-Taking the Permian Shanxi Formation 3# coal seam in the south of Qinshui Basin as an example	Tianyun Wang ^{1,2} , Tao Li ¹ , Jingchun Tian ² , Pei Ke ¹ , Yuan Li ¹ , Yan Hou ¹ , Wei Liu ¹ 1. BGP, CNPC., Zhuozhou, Hebei; 2. Institute of Sedimentary Geology, Chengdu University of Technology, Chengdu
15:25-15:30	1 #	P016	Application of the abnormal geological body identification technology in the prediction of drilling and completion risks	Yan Shunlai ^{1*} , Zhou Chenggang ¹ , Zhou Hongbo ¹ , Zhao Qing ¹ , Li Xiangwen ¹ , Cai Wanchun ² , Wang Yanqiu ² , Zhang Xingwang ² , Wang We ² , Su Dongpo ² 1. BGP, CNPC; 2. PetroChina Tarim Oilfield Company
15:30-15:35	1 #	P017	Improved GAN neural network for seismic data reconstruction	FENG Yongji ^{1,2} , CHEN Xuehua ^{1,2} 1. Key Lab of Earth Exploration & Information Techniques of Ministry of Education, Chengdu University of Technology; 2. Key La of Oil and Gas Reservoir Geology and Exploitation, Chengdu University of Technology
15:35-15:40	1 #	P018	IAAn improved drift-flux model for oil/water two-phase flow in vertical large-diameter pipes with low flowrate	Hao Qin ^{1*} , Xiangjun Liu ¹ , Meng Chen ¹ , Weifeng Xie ¹ , Minjun Qin ² , Zhongtao Wang ² 1. College of Geoscience and Technology, Southwest Petroleum University; 2. CNPC LOGGING Production Logging Center, Xi'an Shaanxi
15:20-15:25	2 #	P019	Petrophysical properties of continental shale in the 7th member of Triassic Yanchang Formation, Ordos Basin	Min Sun ¹ , Jixin Deng ¹ , 1.Chengdu University of Technology
15:25-15:30	2 #	P020	Fine reservoir characterization technologies for tight sandstone exploration of Shaximiao Formation: Case from well YT-H1 in Sichuan Basin	Zhang Jinglei ^{1*} , Zhang Xiong ¹ , Li Liping ¹ , Xiong Yan ¹ , Si Guoshuai ¹ , Dong Wei ¹ , Li Yuwen ¹ 1. Southwest Geophysical Research Institute of BGP, Chengdu
15:30-15:35	2 #	P021	Static correction method of time depth curve based on mixed density network optimization	Ping Dai ^{1*} , Shulin Pan ² , Southwest Petroleum University
15:35-15:40	2 #	P022	Fine research of seismic data processing technology	QIU Tie-cheng ^{1*} , SHI Meng-chang ¹ , ZHU Wei-xing ² 1. Geophysical-China Oilfield Services Ltd.; 2. CNPC Engineering Technology R&D Co., Ltd.

参会须知

现场注册/报到日期及地点

- 6月26日，周一，09:00-18:00，中国·成都·新都假日酒店，一层大堂
- 6月27日，周二，07:00-17:00，中国·成都·新都假日酒店，一层大堂
- 6月28日，周三，07:00-17:00，中国·成都·新都假日酒店，一层大堂

简明日程

口头报告、展贴报告交流地点：成都新都假日酒店四层宴会厅

日 期	时 间	单 元	分会场主题	地 点
6月27日 上午	08:30-12:05	单元I	开幕式、特邀报告	宴 会 厅
6月27日 下午	13:30-17:45	单元II	地球物理技术在地质工程一体化中的应用和发展趋势	
6月28日 上午	08:00-12:05	单元III	地球物理技术在地质工程一体化中的应用和发展趋势	
6月28日 下午	13:30-17:40	单元IV	地质工程一体化在油气勘探中的应用与进展	
6月27日	15:45-16:05	张贴报告	主题：覆盖地球物理-地质-工程一体化研讨方向	
6月28日	09:45-10:05 15:20-15:40			

注意事项

- 会议期间的自助午晚餐地点：成都新都假日酒店——爱咖啡厅。用餐时请出示餐券。
- 会议期间，所有参会代表须佩戴胸卡入场。
- 为尊重报告的版权，会议所有报告期间禁止任何形式的录音、摄像及录影。

重要联络方式

会议地点

- 中国·四川·成都新都假日酒店，宴会厅
- 地址：四川省成都市新都区马超东路280号
- 电话：86-028-88885888

推荐住宿酒店

- 中国·四川·成都新都假日酒店
- 地址：四川省成都市新都区马超东路280号
- 电话：86-028-88885888

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大会主席



张烈辉

张烈辉，博士生导师，现任西南石油大学校长。1995年获西南石油大学油气田开发工程博士学位。长期从事复杂油气藏渗流、试井及数值模拟等方面的教学和科研工作，先后承担国家杰出青年基金、国家“973计划”、国家油气科技重大专项、教育部人才支持计划课题等省部级以上项目30余项，获国家科技进步二等奖2项，省部级科技进步一等奖5项、二等奖2项。发表学术论文190余篇，其中，SCI、EI收录100多篇，出版教材、专著6部，获发明专利2项。

张教授是教育部长江学者特聘教授，教育部“长江学者和创新团队”创新团队负责人，四川省学术和技术带头人，教育部高校青年教师奖（教育部新世纪优秀人才计划前身）、孙越崎青年科技奖、霍英东青年教师奖、四川省有突出贡献优秀专家。张教授是《Hydrodynamics》、《特种油气藏》、《大庆石油地质与开发》、《油气藏评价与开发》、《天然气工业》等杂志编委。

执行主席



黄旭日

黄旭日，教授，博士生导师，现任西南石油大学地球科学与技术学院院长，SEG国际勘探地球物理学家学会中国区执行理事。黄教授是国家特聘专家，四川省特聘专家，成都市“蓉漂计划”特聘专家，第八届国务院学位委员会学科评议组成员，《石油地球物理勘探》编委会委员，苏格兰赫里瓦特大学博士考试委员会委员。

黄教授长期从事地球物理和油藏工程跨学科融合方法和技术研究。获2009-2010美国SPE（石油工程师学会）杰出讲师奖，2014年SEG国际勘探地球物理学家学会荣誉讲师奖，2016年中国石油学会物探专业委员会优秀讲师奖，省部级奖励4项。授权发明专利12件，软件著作权31件。在《Earth Science Frontier》、《Interpretation》等期刊及国际学术会议上发表论文100余篇，参与著作2部。

特邀报告六

题目：地球物理成像、多尺度刻画与油藏一体化技术

时间：11:15-11:40, 2023年6月27日上午



技术委员会主席



曹卫平

曹卫平，西南石油大学地球物理学教授，2009年获得美国犹他大学地球物理学博士学位。此后，他在雪佛龙（Chevron）、英国石油（BP）、哈里伯顿（Halliburton）、Spectrum/TGS等石油公司及油服公司担任研究科学家。他的经验集中在研究和开发用于地震数据处理和成像的新算法。2019年他加入西南石油大学任教授，他的研究兴趣包括地震信号处理、地震成像和工程地球物理学。



侯明才

侯明才，1992年获东华理工大学（原华东地质学院）学士学位，2000年获成都理工大学硕士学位，2003年获成都理工大学博士学位。2003年7月起，在成都理工大学任教，先后任成都理工大学地球科学学院院长助理、沉积地质研究院院长助理、沉积地质研究院副院长、沉积地质研究院院长、研究生院院长；期间，于2003年5月至2005年12月在成都理工大学地质资源与地质工程博士后流动站工作，2009年1月至2009年6月在瑞士洛桑大学地质古生物研究所担任访问学者邀请教授。2020年11月起，任成都理工大学党委书记、副校长。

主要从事深时沉积学和古地理重建的研究、教学及深层超深层油气勘探的研究。主持国家科技重大专项、国家973、国家自然科学基金、国家地质调查项目以及企业合作的横向项目近百项；发表论文188篇，其中被SCI收录论文36篇、EI论文32篇、CSCD论文95篇；出版专著3部。



胡光岷

胡光岷，教授，博士生导师，教育部新世纪优秀人才计划入选者，四川省有突出贡献的优秀专家。1986年本科毕业于南京大学计算机系，1992年和2000年在成都理工大学分别获得硕士和博士学位，2000年至2003年在电子科技大学进行博士后研究，2002年至2003年香港理工大学访问学者。

胡教授的主要研究方向包括复杂多维信息处理、油气勘探信息处理等，作为课题负责人先后承担过科研项目五十余项，其中包括自然科学基金重点项目、国家重大专项、军委科技委创新特区项目和各种横向课题等。曾获国家科技进步三等奖一次、部科技进步二等奖两次。发表论文八十余篇，其中被SCI或EI收录七十余篇。

特邀报告三

题目：先验知识引导的地质建模技术研究进展

时间：09:35-10:00, 2023年6月27日上午



毛伟建

毛伟建，获中国科学院硕士学位，意大利TRIESTE大学博士学位。1989至1991年在意大利国际理论物理研究中心（ICTP）从事博士后研究。1991至1997年任英国LEEDS大学高级研究员。1997至2012年在全球最大油气勘探和开发公司斯伦贝谢的伦敦和休斯顿研发中心先后任高级研究员和首席科学家。2012年至今任中国科学院精密测量科学与技术创新研究院研究员，计算与勘探地球物理研究中心主任，主要研究兴趣是陆地和深海复杂地质构造条件下的高精度地震数据处理、正演、偏移成像和反演。



巫芙蓉

巫芙蓉，正高级工程师，中国石油东方地球物理公司西南物探研究院，高级技术专家。她致力于山地地震勘探技术的研究与应用30余年，先后组织承担、完成了省部级及以上科技项目13项，授权国家发明专利10件，获国家技术发明二等奖1项，省部级科技进步奖8项；授权国家发明专利10件；发表科技论文40篇。2007年获中国第十六届“孙越崎青年科技奖”，2015年享受国务院政府特殊津贴，2017年入选“百千万人才工程”国家级人选，同时被授予“有突出贡献中青年专家”荣誉称号。

特邀报告四

题目：川南页岩气地震地质工程一体化应用实践

时间：10:25-10:50, 2023年6月27日上午



王一博

王一博，中国科学院地质与地球物理研究所研究员，博士生导师，所学术委员会委员，国家杰出青年基金获得者，国家重点研发计划变革性项目首席科学家。曾先后在美国犹他大学、沙特阿拉伯国家石油公司、英国石油美国分公司、北京大学从事科研工作。目前主要研究方向为勘探与油藏地球物理。现任地球物理学报副主编、中国地球物理学会青年工作委员会主任、世界青年地球科学家联盟中国委员会副主席。曾担任Acta Geodynamica et Geomaterialia期刊编委、欧洲地球科学家与工程师学会教育委员会委员等职务。

特邀报告五

题目：非常规储层水力压裂分布式光纤声波传感监测

时间：10:50-11:15, 2023年6月27日上午



张怀

张怀，中国科学院大学教授、博士生导师，国家杰出青年基金获得者。2000年于中国科学院数学研究所获博士学位。2002年入职中国科学院研究生院（中国科学院大学前身），一直从事计算地球动力学领域的交叉学科创新性研究，成功开发了我国第一个自主知识产权的并行有限元程序自动生成系统并将其部署到求解诸多计算地球动力学科学问题。在超大规模科学计算与可视化等领域取得重要研究成果。现担任中国科学院计算地球动力学重点实验室主任，中国力学学会地球动力学专业委员会副主任委员，中国力学学会第九届、第十一届理事会理事。

技术委员会委员 (按姓氏首字母排序)

蔡涵鹏，电子科技大学

陈果，中国石油集团川庆钻探工程有限公司

刁永波，东方地球物理勘探有限责任公司西南物探研究院中国

高照奇，西安交通大学

龚飞，中国矿业大学（北京）

韩翀，中国石油集团川庆钻探工程有限公司

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梁虹，东方地球物理勘探有限责任公司西南物探研究院

欧阳明华，中国石油集团川庆钻探工程有限公司

潘树林，西南石油大学

唐静，西南石油大学

王治国，西安交通大学

窝聿楷，西南石油大学

吴大奎，中国石油集团川庆钻探工程有限公司

谢剑勇，成都理工大学

杨晓，东方地球物理勘探有限责任公司西南物探研究院

臧殿光，东方地球物理勘探有限责任公司西南物探研究院

张庆臣，中国科学院精密测量科学与技术创新研究院

张晓斌，东方地球物理勘探有限责任公司西南分公司



特邀报告

大会特邀报告一

题目：致密油气地震波探测的超分辨反演和多维度表征技术

时间：08:45-09:10, 2023年6月27日 上午

演讲者：高静怀，西安交通大学

讲员介绍



高静怀，博士生导师，西安交通大学西安数学与数学技术研究院副院长，国家自然科学基金重大项目首席科学家，海洋油气勘探国家工程中心地震波动信号分析分中心主任。长期致力于油气勘探地球物理学基础理论与方法的研究和教学工作，是我国非平稳地震数据超分辨反演和相空间多维度表征理论方法的提出者和完成人。主要聚焦非常规油气勘探开发地球物理基础理论创新和突破瓶颈的关键技术研发，在国际上率先提出了致密油气介质中波的控制方程，为这类油气储层勘探开发奠定了理论基础，已在我国陆上、海上及海外油气勘探中得到推广应用。主持或承担国家自然科学基金重大项目“非常规油气勘探与开发地球物理基础理论与方法研究”、国家自然科学基金重大研究计划地学领域集成项目等多类科研项目40余项；发表高水平论文243篇，获授权发明专利45件，美国专利4件。获教育部科学技术一等奖（第一完成人）、CSIAM吴文俊应用数学奖。享受国务院政府特殊津贴，“高静怀科学家工作室”首席科学家，西安交大领军学者。担任《IEEE TGRS》副主编和《地球物理学报》期刊编委。

大会特邀报告二

题目：基于光纤地震地质工程一体化技术与应用

时间：09:10-09:35, 2023年6月27日 上午

演讲者：余刚，中国石油集团东方地球物理勘探有限责任公司

讲员介绍



余刚博士是 BGP 光学科技部的高级技术总监和 BGP 总裁的高级技术顾问，为BGP光学科技事业部和非地震事业部提供技术支持，为水力压裂微地震监测、分布式光纤声波传感（DAS）VSP测量和三维VSP成像、页岩气储层综合表征、海洋MT和CSEM、陆地MT和TFEM、井地TFEM等项目提供技术建议。

余刚博士拥有成都理工大学勘探地球物理学学士学位、地球物理仪器学硕士学位，以及澳大利亚麦考瑞大学应用地球物理博士学位。他是国际勘探地球物理学家学会（SEG）、欧洲地质学家与工程师学会（EAGE）、国际岩石物理学家与测井分析师学会（SPWLA）的活跃会员。

余刚博士拥有超过35年的地球物理、岩石物理、海洋 MT 和 CSEM、井孔地震和测井服务的国际经验，为石油应用、环境、地下水和采矿业服务。他领导、协调和参与了许多先进的地球物理研发项目，并表现出优秀的组织、运营、业务开发、营销、沟通和解决问题的能力。



大会特邀报告七

题目：广域电磁法在油气领域的研究与应用

时间：11:40-12:05, 2023年6月27日 上午

演讲者：李帝铨，中南大学

讲员介绍



李帝铨，中南大学地球科学与信息物理学院教授，博士生导师；中南大学地球科学与信息物理学院应用地球物理系副主任；有色金属成矿预测与地质环境检测教育部重点实验室副主任；湖南继善高科技有限公司技术总监。2014年获得中国有色金属工业科学技术发明一等奖；2016年获得湖南省科技进步一等奖；2018年获得国家技术发明一等奖；2019年湖南省中青年学者培养计划；2021年获得第十一届“湖南省青年科技奖”；2022年获得第十七届中国青年科技奖。

大会特邀报告八

题目：低渗致密油藏地震地质工程一体关键技术

时间：13:30-13:55, 2023年6月27日 下午

演讲者：刘浩杰，中石化胜利油田勘探开发研究院

讲员介绍



刘浩杰，博士，研究员，中国石化胜利油田油藏地球物理高级专家、物探研究院副院长，学术兼职有中国工业和应用数学学会理事、中国石油大学（华东）和中国海洋大学兼职硕士指导教师。2005年博士毕业于中国科学院声学研究所。曾获“山东省优秀博士后”、“中国石化闵恩泽青年科技人才奖”等荣誉称号。长期从事油藏地球物理技术研究工作，作为项目长、技术首席先后承担国家863项目、中石化项目、博士后基金项目等10余项，获得省部级科技进步奖5项，发表论文20余篇，出版专著1部。研究领域包括地震岩石物理、地震储层描述、地震地质工程一体化、解释建模一体化、人工智能等。

技术推介

斯伦贝谢

2023年6月28日，周三

宴会厅 成都新都假日酒店

09:25-09:45..... 地震地质工程一体化技术在非常规油气藏的应用（赵春段，何皎，斯伦贝谢数字与一体集团）

斯伦贝谢 SLB（纽约证券交易所代码：SLB）是一家全球性的科技公司，致力能源创新驱动，构建和谐地球家园。我们的足迹遍布全球100多个国家，员工的国籍数量几乎是这些国家数量的两倍。每一天我们都在努力实现石油和天然气的低碳减排，开发可扩展的新型能源技术，以加速能源转型。了解更多信息，请访问slb.com。



会议日程

现场注册 成都新都假日酒店大堂		
2023年6月26日	09:00-18:00	现场注册
	16:00-16:30	分单元主席会议
2023年6月27日	07:00-17:00	现场注册
2023年6月28日	07:00-17:00	现场注册

2023年6月27日，周二，上午		
主会场：宴会厅 单元一：开幕式 & 大会特邀报告 单元主席：文晓涛，文涛		
时间	题 目	报告人
08:30-08:35	开幕致辞-SEG代表	Arthur Cheng
08:35-08:40	开幕致辞- 西南石油大学代表	待定
08:40-08:45	开幕致辞- 大会技术主席代表	文晓涛
08:45-09:10	特邀报告 1: 致密油气地震波探测的超分辨反演和多维度表征技术	高静怀
09:10-09:35	特邀报告 2: 基于光纤地震地质工程一体化技术与应用	余刚
09:35-10:00	特邀报告 3: 先验知识引导的地质建模技术研究进展	胡光岷
10:00-10:25	集体合照，茶歇	
10:25-10:50	特邀报告 4: 川南页岩气地震地质工程一体化应用实践	巫芙蓉
10:50-11:15	特邀报告 5: 非常规储层水力压裂分布式光纤声波传感监测	王一博
11:15-11:40	特邀报告 6: 地球物理成像、多尺度刻画与油藏一体化技术	黄旭日
11:40-12:05	特邀报告 7: 广域电磁法在油气领域的研究与应用	李帝铨
12:10-13:30	午餐	

2023年6月27日，周二，下午		
主会场：宴会厅 单元二：地球物理技术在地质工程一体化中的应用和发展趋势 单元主席：杨晓，王治国		
时 间	题 目	作 者
13:30-13:55	特邀报告 8: 特邀报告 8: 低渗致密油藏地震地质工程一体关键技术	刘浩杰，中石化胜利油田勘探开发研究院
13:55-14:20	主旨报告 1: 方位各向异性反演在层属性裂缝预测中的应用	金其虎*，姚正新，王雪峰，刘聪伟，李飞，东方地球物理公司新兴物探开发处
14:20-14:45	主旨报告 2: 基于井震偏差的地震成像更新方法	黎孟承* ^① ，曹卫平 ^① ，黄旭日 ^① ，徐明华 ^② 1.西南石油大学地球科学与技术学院；2.中国石油集团川庆钻探工程有限公司地质勘探开发研究院
14:45-15:05	苏里格气田奥陶系岩溶风化壳气藏有利勘探区地震预测关键技术	韩翀* ^① ，陈明江 ^① ，彭宇 ^① 1.中国石油川庆钻探工程有限公司地质勘探开发研究院
15:05-15:25	水平井裂缝综合识别与分类	王磊飞，刘长春，李杰，杨雯婷，中国石油长庆油田公司；刘博，刘勋奇，李伸专，武芳芳，卢庆治，马福建，斯伦贝谢中国公司
15:25-15:45	基于井电震融合的含油气性预测技术	黄佳，湖南继善高科技有限公司油气研究院
15:45-16:05	茶歇，张贴报告	
16:05-16:25	基于叠前地震反演的致密砂砾岩脆性指数计算实例	陈耀杰* ^① ，潘树林 ^① ，西南石油大学地球科学与技术学院
16:25-16:45	五维叠前数据规则化方法及在采集脚印压制中的应用	冯心远* ^① ，刘桓 ^① ，刘伟明 ^① ，刘杰 ^① 1.中国石油勘探开发研究院西北分院，甘肃兰州
16:45-17:05	线束状三维VSP转换横波的成像处理与应用	闫媛媛* ^① ，冉崎 ^① ，秦俐 ^② ，雷程 ^① 1.中国石油西南油气田公司勘探开发研究院；2. 东方地球物理勘探有限责任公司
17:05-17:25	基于面向目标全波形反演方法的碳酸盐岩溶洞储层刻画	李凯* ¹ ，黄旭日 ¹ ，胡叶正 ¹ ，唐静 ¹ ，肖文 ² 1.西南石油大学；2.中国石油塔里木油田分公司勘探开发研究院

17:25-17:45	页岩气长段多簇压裂技术应用及认识	蔡默仑 ¹ ，胡周 ² ，曹银平 ¹ 1.中国石油集团川庆钻探工程有限公司地质勘探开发研究院；2.中国石油集团川庆钻探工程有限公司页岩气勘探开发项目经理部
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2023年6月28日，周三，上午		
主会场：宴会厅 单元三：地球物理技术在地质工程一体化中的应用和发展趋势 单元主席：臧殿光，胡光岷		
时 间	题 目	作 者
08:00-08:25	主旨报告 3: 页岩断裂韧性定量预测方法研究及应用	刘开元，邓小江，巫芙蓉，王小兰，何奇，陈愿愿，程莉莉，黄东山；东方地球物理公司西南物探研究院
08:25-08:45	四川盆地龙马溪组页岩储层裂缝多尺度分期次预测方法	黄小惠 ^{1*} ，吴磊 ¹ ，江雨濛 ¹ ，李洁辛 ¹ ，胡周 ¹ ，王照星 ¹ ，张冠宇 ² ，黄旭日 ² ，徐云贵 ² 1. 中国石油集团川庆钻探工程有限公司页岩气勘探开发项目经理部 2.西南石油大学地球科学与技术学院
08:45-09:05	基于深度学习的面波频散曲线反演	吴映和*，潘树林，西南石油大学地球科学与技术学院
09:05-09:25	S区煤层气地震有利区预测分析	李陶* ¹ ，王天云 ^{1, 2} ，张伟 ¹ ，李嘉宁 ¹ ，孙小萍 ¹ ，丁清香 ¹ 1.中国石油集团东方地球物理勘探有限责任公司；2.四川省成都市成都理工大学沉积地质研究所
09:25-09:45	技术推介-地震地质工程一体化技术在非常规油气藏的应用	赵春段，何皎，斯伦贝谢数字与一体集团
09:45-10:05	茶歇，张贴报告	
10:05-10:25	四川盆地高石梯地区灯二段岩溶期古地貌恢复新技术	赵小辉，贺川航，乐锦波，陈静昱，范晓晓，张巧依，中国石油东方地球物理公司，河北涿州

10:25-10:45	考虑裂缝倾角的缝洞型储层孔隙度指数计算新模型	田杰 ^{*1} , 刘红岐 ^{*1} , 王亮 ² , 司马立强 ¹ 西南石油大学地球科学与技术学院; 2. 成都理工大学能源学院
10:45-11:05	机器学习方法辅助碳酸盐岩气藏井位优化研究	罗勇 ^{*12} , 范竞仁 ² , 高志彬 ² , 文光耀 ³ 1.西南石油大学油气藏地质及开发工程国家重点实验室, 四川成都; 2.中石油川庆钻探地质勘探开发研究院, 四川成都; 3.中油国际阿姆河天然气公司, 北京
11:05-11:25	基于地层造影的测井渗透率计算方法	杨李*, 伍翊嘉, 肖茂林, 牟泳澄, 川庆钻探工程有限公司地质勘探开发研究院
11:25-11:45	地球物理随钻跟踪技术在页岩气钻井地质工程一体化中的应用及效果	李阳静 ^{①*} , 王小兰 ^① , 谭荣彪 ^① , 李赫 ^① , 郭豫辰 ^① , 曾珍 ^① , 张入月 ^① 1.中国石油东方地球物理公司, 西南物探研究院
11:45-12:05	四川盆地陆相页岩油气地球物理关键技术及应用	王瑜、林正良、胡华锋、周单、许凯, 中石化石油物探技术研究院有限公司

2023年6月28日, 周三, 下午		
主会场: 宴会厅 单元四: 地质工程一体化在油气勘探中的应用与进展 单元主席: 余刚, 张怀		
时间	题 目	作者
13:30-13:55	主旨报告 4: 从四川盆地到阿曼盆地: 寒武纪—志留纪构造沉积分异过程的地质与地球物理证据	梁霄 ^{1,2*} , 陈杰 ¹ , 马文辛 ¹ 1.中国石油集团川庆钻探工程有限公司地质勘探开发研究院; 2.成都理工大学油气藏地质与开发工程国家重点实验室
13:55-14:20	主旨报告 5: 四川盆地震旦系灯影组深层碳酸盐岩储层地震响应模式及预测技术	张冠宇 ^{1*} , 黄旭日 ¹ , 徐云贵 ¹ , 陈康 ² , 彭达 ² 1.西南石油大学地球科学与技术学院 2.中国石油西南油气田公司勘探开发研究院
14:20-14:40	三维地震页岩油水平井优化部署及轨迹导向技术在庆城油田的应用	张杰 ^{*①②} , 李斐 ^① , 姚宗惠 ^① , 曾亚丽 ^① , 杨超 ^① , 龙盛芳 ^① , 高楠 ^① 1.中国石油天然气股份有限公司长庆油田分公司勘探开发研究院; 2.低渗透油气田勘探开发国家工程实验室
14:40-15:00	地震地质工程一体化技术在页岩油中应用研究	杜金玲 ¹ , 何吉祥 ² , 林鹤 ¹ , 张方 ² , 许文莉 ¹ 1.东方地球物理公司; 2.新疆油田公司勘探开发研究院
15:00-15:20	地质工程一体化中的地应力预测3.0研究	杨建礼, 刘春雨*, 范伟佳, 徐园园, 北京珠玛阳光科技有限公司
15:20-15:40	茶歇, 张贴报告	
15:40-16:00	碳酸盐岩储层裂缝综合检测与预测研究	洪余刚*, 卢立泽, 王贺华, 米中荣, 杨滔, ADNOC&振华石油股份有限公司成都研究中心
16:00-16:20	鄂尔多斯盆地长7页岩油甜点地震预测技术与应用	曾亚丽 ^{*①} , 黄黎刚 ^① , 杨超 ^① , 龙盛芳 ^① 1.中国石油天然气股份有限公司长庆油田分公司勘探开发研究院
16:20-16:40	土库曼斯坦阿姆河右岸M气田产原油分析	江林蔚 ^① , 薛陶峰 ^① , 张李 ^① 1.中国石油川庆钻探工程有限公司

16:40-17:00	基于录井资料的随钻井旁构造恢复技术——以W2井为例	陈丹 ^① ，尹平 ^① ，朱亮 ^② ，张雷 ^① ，李金蓉 ^① ，1.川庆钻探工程有限公司地质勘探开发研究院 2.川庆钻探工程有限公司国际工程公司
17:00-17:20	盐构造钻井稳定性分析及在库车坳陷克深10区块的应用	王明文 ^① ，罗纲 ^{*①} ，陈朝伟 ^② ，房超 ^② 1.武汉大学测绘学院；2.中国石油集团工程技术研究院有限公司
17:20-17:40	闭幕式 & 颁奖典礼	

张贴报告				
单元主席：王一博，张怀 2023年6月27日，周二，15:45-16:05				
时 间	立式显示屏编号	编 号	题 目	作 者
15:45-15:50	1#	P001	基于二维变分模态分解和广义S变换相结合的储层检测方法	邱雷宇 [*] ，陈学华，张杰，牛霄鹏，成都理工大学油气藏地质及开发工程国家重点实验室
15:50-15:55	1#	P002	利用微地震井中监测技术评估昭通页岩气水力压裂效果	储仿东 ^{1,2} ，梁兴 ³ ，步云伟 ³ ，孙庭斌 ¹ ，刘腾蛟 ^{1,2} ，冯超 ^{1,2} 1.东方地球物理勘探有限责任公司；2.中油奥博（成都）科技有限公司；3.中国石油浙江油田公司
15:55-16:00	1#	P003	叠前道集高分辨率衰减属性提取方法	李波 ^{*1,2} ，文晓涛 ^{1,2} ，唐超 ^{1,2} ，李垒 ^{1,2} 1.成都理工大学地球物理学院 2.油气藏地质及开发工程国家重点实验室
16:00-16:05	1#	P004	基于稀疏节点的微地震智能化长期监测技术	李子正、朱海波、王瑜，中石化石油物探技术研究院有限公司
15:45-15:50	2#	P005	利用地球物理技术预测页岩气水平井套管变形	何思进 ^{*①} ，曾嵘 ^② ，李宝 ^① ，周孝敬 ^① 1.中石油东方地球物理勘探有限责任公司西南物探研究院；2.中石油西南油气田分公司；3.中石油川庆钻探工程有限公司

15:50-15:55	2#	P006	基于L1/2正则化的非平稳地震信号稀疏反演	康治梁，郭颖，崔梦迪，康昀颖，白剑，姜龙燕，申进，肖琳，金霞霞 中国石化华北油气分公司勘探开发研究院
15:55-16:00	2#	P007	致密砂岩气采集处理解释一体化技术研究及应用	曾华会 ¹ ，杨广广 ² ，韩嵩 ² ，刘桓 ¹ ，孟会杰 ¹ 1.中国石油勘探开发研究院西北分院；2.中国石油西南油气田分公司勘探开发研究院
16:00-16:05	2#	P008	水平井产剖监测DTS资料处理方法	杨小慧，林正良，杨心超，陈占国、周单，中石化石油物探技术研究院有限公司
单元主席：潘树林 2023年6月28日，周三，09:45-10:05				
09:45-09:50	1#	P009	深层复杂冲断褶皱带大斜度井随钻导向技术及其在川西北部龙门山山前带双鱼石气田的应用	段杰 ^{1*} ，刘属闵 ¹ ，李昱瑶 ¹ ，吴博闻 ¹ ，郑虹 ¹ ，邓绍强 ¹ ，中国石油东方地球物理勘探有限责任公司西南物探研究院
09:50-09:55	1#	P010	CQ-GRI随钻解释系统进展及应用	赵磊 ^{1,2} ，李金蓉 ¹ ，尹平 ¹ ，阎荣辉 ³ ，雷银 ⁴ ，唐谢 ¹ ，阮聪 ¹ ，梁霄 ¹ ，李波 ¹ 1 中国石油集团川庆钻探工程有限公司地质勘探开发研究院 2 成都理工大学油气藏地质与开发工程国家重点实验室 3 中国石油天然气股份有限公司长庆油田分公司工程技术管理部 4 中国石油天然气股份有限公司西南油气田分公司工程技术研究院
09:55-10:00	1#	P011	四川盆地长宁昭通地区正断层形成机制研究	周诗雨 ^{*①} ，蒋波 ^① ，黄宇 ^② ，张怀明 ^② 1.中国石油东方地球物理公司西南物探研究院；2.中国石油东方地球物理公司西南物探分公司
09:45-09:50	2#	P012	川中金华——秋林地区致密气藏处理技术与应用	鲜成龙，熊艳，肖勇，章雄，夏铭，中国石油东方地球物理公司
10:25-10:30	2#	P013	四川盆地CN地区走滑断层特征研究	李睿宁 ^① ，黄丽鹃 ^① ，张怀明 ^② 1.中石油集团东方地球物理勘探有限责任公司西南物探研究院；2.中石油集团东方地球物理勘探有限责任公司西南物探分公司
09:55-10:00	2#	P014	顺北超深碳酸盐岩断控储集体地震响应特征分析	龚伟 [*] ，文晓涛，成都理工大学



单元主席：潘树林 2023年6月28日，周三，15:20-15:40				
15:20-15:25	1#	P015	基于叠前OVS道集的煤层气储层裂缝预测研究	王天云* ^{①②} ，李陶 ^① ，田景春 ^② ，柯沛 ^① ，李远 ^① ，侯艳 ^① ，刘伟 ^① 1.中国石油东方物探新兴物探开发处；2.成都理工大学沉积地质研究院
15:25-15:30	1#	P016	异常地质体识别技术在钻完井风险预测中的应用	闫顺来 ^{1*} ，周成刚 ¹ ，周红波 ¹ ，赵晴 ¹ ，李相文 ¹ ，蔡万春 ² ，王彦秋 ² ，张兴旺 ² ，王伟 ² ，苏东坡 ² 1.东方地球物理勘探有限责任公司；2.中国石油塔里木油田分公司
15:30-15:35	1#	P017	改进GAN神经网络的地震数据重建	冯永基* ^{①②} ，陈学华 ^{①②} 1.成都理工大学油气藏地质及开发工程国家重点实验室；2.成都理工大学地球勘探与信息技术教育部重点实验室
15:35-15:40	1#	P018	低流量大直径垂直管油水两相漂流模型研究	秦昊 ^{1*} ，刘向君 ¹ ，陈猛 ¹ ，谢伟峰 ¹ ，秦民君 ² ，王中涛 ² 1.西南石油大学地球科学与技术学院；2.中国石油集团测井有限公司长庆分公司
15:20-15:25	2#	P019	鄂尔多斯盆地三叠系延长组7段陆相页岩岩石物理性质	孙敏 ¹ ，邓继新 ¹ 1.成都理工大学
15:25-15:30	2#	P020	储层精细刻画技术在沙溪庙组致密砂岩勘探中的应用——以YT-H1井为例	张菁菁* ^① ，章雄 ^① ，李丽平 ^① ，熊艳 ^① ，司国帅 ^① ，董伟 ^① ，李玉雯 ^① 1.中国石油东方地球物理公司西南物探研究院
15:30-15:35	2#	P021	基于混合密度网络优化的时深曲线静校正方法	代平* ^① ，潘树林 ^② ，西南石油大学
15:35-15:40	2#	P022	地震资料处理技术的精细化研究思路探讨	邱铁成* ^① ，石孟常 ^① ，朱卫星 ^② 1.中海油服物探事业部，天津；2.中国石油集团工程技术研究院有限公司，北京

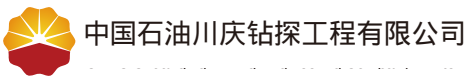
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