

国际勘探地球物理学家学会



SEG中国微信公众号

#### SEG 中国

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SEG 1st Tarim Ultra-Deep Oil & Gas Exploration Technology Workshop SEG 第一届塔里木超深油气物探技术研讨会

3-5 JUNE 2024 KORLA·CHINA 2024年6月3-5日 中国·库尔勒

# WORKSHOP Official Program 会议手册



# 第一届塔里木超深油气物探技术研讨会



#### Registration 注册参会

Only registrants who have successfully finished the registration process are authorized to get access to the event venue with delegate badge and attend the workshop. Any questions, please email to china@seg.org

参会代表需在报到当天或之前完成注册,现场领取会议材料,凭参会代表证进入会场参会交流。 住宿及会议期间早餐代表自理,午晚餐中会议统一安排。酒店房间紧张,请务必提前预定。 如需协助,请联系会议邮箱:china@seg.org。

#### Online Registration 在线注册







**Domestic Registration** 国内注册埴写

#### Onsite Registration 现场注册/报到

- Monday, 3 June 2024, 08:00-19:30, 2nd Floor, Main Building, R & D Center of Tarim Oilfield Company
- Tuesday, 4 June 2024, 08:00-19:30, 2nd Floor, Main Building, R & D Center of Tarim Oilfield Company
- Wednesday, 5 June 2024, 09:00-14:00, 2nd Floor, Main Building, R & D Center of Tarim Oilfield Company
- 2024年6月3日,周一,08:00-19:30,塔里木油田公司研发中心主楼二层,靠近学术报告厅
- 2024年6月4日,周二, 08:00-19:30, 塔里木油田公司研发中心主楼二层, 靠近学术报告厅
- 2024年6月5日,周三,09:00-14:00,塔里木油田公司研发中心主楼二层,靠近学术报告厅

#### Technical Sessions 会议报告与交流

All the oral & poster sessions are held on the 2<sup>nd</sup> Floor, Main Building, R & D Center of Tarim Oilfield Company.

口头/张贴报告地点:塔里木油田公司研发中心主楼二层

(口头报告:学术报告厅、2A、2C会议室,张贴报告:二层走廊靠近学术报告厅)

All participants must wear the name badges to attend all the sessions. 会议期间,所有参会代表须佩戴胸卡入场。

To respect the copyright of all the presentations, any forms of sound, camera or video recordings are not allowed during the sessions.

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。

# 2024 SEG 第一届塔里木超深油气物探技术研讨会

#### Brief Agenda 简明日程

Date 日期	Time 时间	Activity & Technical Sessions 活动事项与技术交流单元		
	08:00-19:30	Onsite Registration 会议报到、现场注册 Location:2™ Floor, Main Building, R & D Center of Tarim Oilfield Company 塔里木油田公司研发中心主楼二层,靠近学术报告厅		
Monday 3 June 2024	10:30-13:30 16:30-19:30	Pre-workshop Short Cours Location : TBD 待定	se 会前课程:复杂地表条件下的	浅-中-深地震成像
2024年6月3日	13:30-15:30	Lunch 午餐		
星期一	18:00-19:00	Session Chair Meeting 分会场主席会议 Location : TBD 待定		
	19:30-20:30	Dinner 晚餐		
	08:00-19:30	Onsite Registration 会议报 Location : 2 <sup>nd</sup> Floor, Main Building, R &		木油田公司研发中心主楼二层,靠近学术报告厅
Tuesday 4 June 2024	09:00-09:15	Opening Session 大会开幕式 Session Chair 主持人: Location: Lecture hall, 2 <sup>nd</sup> Floor, Main Building, R & D Center of Tarim Oilfield Company 塔里木油田公司研发中心主楼二层,学术报		
2024年6月4日 星期二,上午 09:15-13:3		Invited Plenary Session 全体会议暨特邀报告单元 Session Chair 主持人: Location:Lecture hall, № Floor, Main Building, R & D Center of Tarim Oilfield Company 塔里木油田公司研发中心主楼二层,学术报告厅		
	11:20-11:50	Coffee Break, Group Photo 茶歇、合影 Location : Foyer Area outside of Lecture Hall 学术报告厅外走廊 (合影地点现场通知 )		
	13:30-15:30	Lunch 午餐		
	16:10-17:50	Oral Session-1, 单元1: 超深层地震探测理论与方法 Session Chair 主持人: Location: Lecture Hall 地点: 学术报告厅	Oral Session-2, 单元2: 超深层陆上地震采集技术 (含近地表) Session Chair 主持人: Location: Meeting Room 2A/2A会议室	Oral Session-3, 单元3: 超深层保真去噪与弱信号恢复技术 Session Chair 主持人: Location: Meeting Room 2C 地点: 2C会议室
Tuesday 4 June 2024 2024年6月4日 星期二,下午	17:50-18:10		R层非均质储层预测与烃类检测技	revoirs & hydrocarbon detection techniques 术
	18:10-19:30	Oral Session-4, 单元4: 超深层地震探测理论与方法 Session Chair 主持人: Location: Lecture Hall 地点: 学术报告厅	Oral Session-5, 单元5: 超深层陆上地震采集技术 (含近地表) Session Chair 主持人: Location: Meeting Room 2A/2A会议室	Oral Session-6, 单元6: 超深层保真去噪与弱信号恢复技术 Session Chair 主持人: Location: Meeting Room 2C 地点: 2C会议室
	19:30-20:30	Dinner 晚餐		

Date 日期	Time 时间		Activity & Technical Session 活动事项与技术交流单元	
	09:00-14:00	Onsite Registration 会议报到、现场注册 Location : 2 <sup>nd</sup> Floor, Main Building, R & D Center of Tarim Oilfield Company 塔里木油田公司研发中心主楼二层,靠近学术报告厅		
	09:30-11:10	Oral Session-7, 单元7: 超深层井中地震与重磁电技术 Session Chair 主持人: Location: Lecture Hall 地点:学术报告厅	Oral Session-8, 单元8: 超深层非均质储层预测与烃类检测技术 Session Chair 主持人: Location: Meeting Room 2A 地点: 2A会议室	Oral Session-9, 单元9: 超深层速度建模与偏移成像技术 Session Chair 主持人: Location: Meeting Room 2C 地点: 2C会议室
Wednesday 5 June 2024 2024年6月5日 星期三,上午	11:10-11:40	Coffee Break & Poster Session B: Theory & methods of ultra-deep seismic detection, Ultra-deep fidelity denoising and weak signal recovery technology 茶歇,张贴报告单元B: 超深层地震探测理论与方法,超深层保真去噪与弱信号恢复技术 Session Chair 主持人: Location: Foyer Area, Outside of Lecture Hall 地点:学术报告厅外走廊		
	11:40-13:20	Oral Session-10, 单元10: 超深层陆上地震采集技术 (含近地表), 去噪与弱信号恢复技术 Session Chair 主持人: Location: Lecture Hall 学术报告厅	Oral Session-11, 单元11: 超深层非均质储层预测与烃类检测技术 Session Chair 主持人: Location: Meeting Room 2A 地点: 2A会议室	Oral Session-12, 单元12: 超深层速度建模与偏移成像技术 Session Chair 主持人: Location: Meeting Room 2C 地点: 2C会议室
	13:30-15:30	Lunch 午餐		
	16:10-17:30	Oral Session-13, 单元13: 超深层保真去噪与弱信号恢复技术, 速度建模与偏移成像技术 Session Chair 主持人: Location: Lecture Hall 学术报告厅	Oral Session-14, 单元14: 超深层非均质储层预测与烃类检测技术 Session Chair 主持人: Location: Meeting Room 2A 地点: 2A会议室	Oral Session-15, 单元15: 超深层速度建模与偏移成像技术 Session Chair 主持人: Location:Meeting Room 2C 地点: 2C会议室
Wednesday 5 June 2024	17:30-17:50		?层速度建模与偏移成像技术	g and migration imaging technology
2024年6月5日 星期三,下午	17:50-19:10	Oral Session-16, 单元16: 超深层非均质储层预测与 烃类检测技术, 去噪与弱信号恢复技术 Session Chair 主持人: Location: Lecture Hall 学术报告厅	Oral Session-17, 单元17: 超深层保真去噪与弱信号恢复、 速度建模与偏移成像技术 Session Chair 主持人: Location: Meeting Room 2A/2A会议室	Oral Session-18, 单元18: 超深层速度建模与偏移成像技术 Session Chair 主持人: Location: Meeting Room 2C 地点: 2C会议室
	19:10-19:30	Session Chair 主持人:	clusion & awarding 会议总结、 Building, R & D Center of Tarim Oilfield Comp	颁奖与闭幕 wany 塔里木油田公司研发中心主楼二层,学术报告厅
	19:30-20:30	Dinner 晚餐		

#### Workshop Meals 会议用餐

The dining place of the lunches & dinners is in the 9th staff canteen. Meal coupons will be required.

会议期间的午/晚餐地点:第九职工餐厅。用餐时请出示午餐券。

2024 SEG 1st Tarim Ultra-Deep Oil & Gas Exploration Technology Workshop

# 第一届塔里木超深油气物探技术研讨



#### Meeting Venue

- Lecture Hall, Meeting Room 2A & 2C, 2nd Floor, Main Building, R & D Center of Tarim Oilfield Company
- Add: East Road, Tazhi, Korla, Xinjiang, China

#### 会议地点

- 中石油塔里木油田公司研发中心 主楼二层学术报告厅、2A、2C会议室
- 地址:中国新疆巴州库尔勒市塔指东路

#### **Recommended Hotel**

**X Korla Pear City Garden Hotel** 

- Add: No.20 Binhe Road, Korla, Xinjiang, 841000, China
- Tel: +86 (0996) 2066666 , +86 15739882333 (Mr. Yang)

**X Tarim Petroleum Apartment** 

Address: No.26, Shihua Rd., Korla, Xinjiang, 841000, China Tel: +86 (0996) 2173170 , +86 (0996) 2170999

#### 推荐住宿酒店

※ 库尔勒梨城花园酒店

• 地址:新疆库尔勒市滨河路20号

• 电话: +86 (0996) 2066666, +86 15739882333 (杨经理)

※ 塔里木石油公寓

地址:新疆库尔勒塔里木石化大道26号

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#### 大会主席

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赵 喆,中石油勘探开发研究院

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# 第一届塔里木超深油气物探技术研讨会





#### **TECHNICAL COMMITTEE** 会议技术委员会



Prof. Xuri Huang 苗旭日 教授

Prof. Xuri Huang (Technical Co-Chair) obtained his PhD (1996) and MS (1994) in reservoir engineering from University of Tulsa. He got his EMAB from Pekin University, 2015. He graduated from the University of Petroleum (PU). China with a BS in applied geophysics in 1985, then worked in an integration research team of the University of Petroleum for seven years. Xuri worked for WesternGeco from 1996 to 2001 in the areas of 4D, seismic interpretation and reservoir characterization. Currently, he is a professor in Southwest Petroleum University and is the president of SUNRISE where he is focusing on tools to close the loop between reservoir engineering and geophysics, geomodeling and seismic inversion etc. Xuri also worked on Oil and Gas property development using his proprietary technologies combined with conventional and modern tools. Xuri is a member of the SPE and the SEG and has served as a committee member for SPE/SEG/AAPG joint 4D and reservoir surveillance workshop 2006, 2008, 2012, committee coordinator 2001 SEG Reservoir Geophysical Symposium, Shenzhen, Technical Chair for SEG 2017 Carbonate Reservoir Workshop, Chengdu, committee member for CGS/SEG conference 2017 Qingdao. He has published more than 80 papers in SPE and SEG conferences and journals, and he was an SPE Distinguished Lecturer for the 2009-2010 series, an SEG Honorary Lecturer in 2014 and an excellent lecturer for China Petroleum Society 2016. Xuri has conducted training sessions for Petrobras and other companies (including CNPC, SINOPEC, CNOOC and Woodside) in closethe-loop technology and new seismic inversion and interpretation techniques. He served as a session chair for SPE, SEG annual meeting many times.

黄旭日博士,教授,博士生导师,国家特聘专家。第八届国务院学位委员会 学科评议组成员,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,《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。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年度SPE杰出讲师奖(石油工程师 学会),2014年度SEG荣誉讲师奖(国际勘探地球物理学家学会),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《Geophysics》《Applied Geophysics》等 期刊及国际学术会议上发表发表论文100余篇,参与著作2部。

#### **KEYNOTE PRESENTATION 5** 特激报告五

Title: Exploration of deep geophysical imaging and target characterization technologies

Time: 10:55-11:20, Tue/4 June 2024

Speaker: Xuri Huang, Southwest Petroleum University

题目: 深层地球物理成像和目标刻画技术的探索 时间: 2024年6月4日, 周二, 10:55-11:20

讲者: 黄旭日. 西南石油大学



Prof. Diquan Li 李帝铨 教授

Prof. Diguan Li (Technical Co-Chair) . has been committed to the research of electromagnetic theory and exploration technology for a long time, and has made many innovative achievements: (1) he has invented the noise reduction technology of multi-frequency periodic signal and the rapid extraction technology of effective information, which has overcome the problem of lack data of electromagnetic method, and the data volume and resolution ability are more than 8 times of the traditional methods: (2) he has invented the shale gas identification based on electromagnetic data, with the characteristic of green, efficient and low-cost, has been widely used in south China: (3) he has proposed the technical method and process of wide field electromagnetic method to exploration oil and gas reservoir in deep: (4) he has proposed the wide field electromagnetic method data processing method for shale gas exploration in southern China, forming the shale gas geophysical exploration method and system for southern China.

Li Diguan has won one first prize of National Technological Invention Award (R2), two first prizes of provincial and ministerial level (R3), and undertook one national key research and development project, one general project of National Natural Science Foundation of China. He served as deputy editor in chief of geophysical exploration discipline of Grand Dictionary of Geosciences, secretary of geological resources and geological engineering volume of the third edition of Encyclopedia of China, member of Engineering Geophysics Committee of China Geophysical Society and vice chairman of Hunan mining Standardization Technical Committee.

李帝铨博士,教授,主要从事电磁勘探方法理论与探测技术的研究,近年 来承担国家重点研发计划课题1项,国家自然科学基金项目2项,其它国家 级纵向项目5项;以第一/通讯作者在《Geophysics》、《Geophysical Journal International》、《Journal of Power Sources》、《中国有色 金属学报》、《地球物理学报》等国内外期刊发表SCI论文30余篇,以第一 发明人授权国家发明专利10件。荣获国家技术发明一等奖1项(R2)、省 部级一等奖2项,中华人民共和国成立70周年纪念章,2020年入选长沙市A 类人才,2021年获得湖南省青年科技奖,2022年获得第十七届中国青年科 技奖。

担任教育部有色金属成矿预测与地质环境监测重点实验室副主任,兼任中 国地球物理学会地球物理技术委员会委员、中国仪器仪表学会地质仪器分 会常务理事兼副秘书长、国家矿业青年科学家论坛学术委员会执行主席、 中国地球物理学会地球电磁专业委员会委员、中国岩石力学与工程学会深 地空间探测与开发分会理事、全国安全职业教育教学指导委员会生产应急 安全专门委员会副主任等职

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Mr. Yudong Ni 倪宇东 先生

Mr. Yudong Ni (Technical Co-Chair). doctor of science in solid geophysics. Professor level senior engineer. Chief technical expert of Tarim Basin.BGP. From 2016 to 2020, served as the project leader of seismic acquisition technology for the "Ultra Deep Gravity, Magnetic, and Electrical Seismic Exploration Technology" a national key research and development plan project during the 13th Five Year Plan period. Has won 4 provincial and ministerial level scientific and technological progress awards. Published a work titled "Vibroseis Seismic Exploration and Acquisition Technology", published more than 30 papers in SCI, El inspection iournals. SEG. EAGE. and other iournals. and obtained more than 20 Chinese patents.

倪字东先生, 固体地球物理学理学博士, 教授级高级工程师,东方物探公司塔 里木探区技术负责人。2016年-2020年任十三五国家重点研发计划项目"超 深层重磁电震勘探技术"地震采集技术课题长。先后获省部级科技进步奖4 项,发表论著《可控震源地震勘探采集技术》,在SCI、EI检索期刊以及SEG、 EAGE等发表论文30余篇,获得中国专利20余项。



Mr. Genaxin Pena 彭更新 先生

Mr. Gengxin Peng (Technical Co-Chair), Geophysical Prospecting Expert of PetroChina Tarim Oilfield Company, Professor Senior Engineer, Doctoral Tutor, He has been engaged in seismic exploration and seismic technology research in the Tarim Basin for more than 30 years, and has participated in many national scientific and technological projects. He has been responsible for the research of the major scientific and technological projects of the Group Company "High-precision 3D Seismic Exploration Technology for Carbonate Rocks" and "Key Seismic Technology Research in Complex Mountain, Loess Plateau and Desert Areas." It has innovated and formed high-precision 3D seismic exploration technology for carbonate rocks and high-density seismic technology for complex mountains. He has made great contributions to oil and gas exploration and deep geophysical exploration technology progress in Tarim Oilfield, and has won 1 provincial and ministerial special award, 5 first prizes, 7 second prizes, co-authored 3 monographs, published more than 30 papers, and authorized 8 Chinese invention patents.

**彭更新先生**,中国石油塔里木油田公司物探专家,教授级高级工程师,博士 生导师。在塔里木盆地从事地震勘探和地震技术研究30多年来,参与多项 国家科技项目研究, 先后负责集团公司重大科技项目《碳酸盐岩高精度三维 地震勘探技术》和《复杂山地、黄土高原、沙漠地区地震关键技术研究》的 研究。创新形成了碳酸盐岩高精度三维地震勘探技术和复杂山地高密度地震 技术,为塔里木油田的油气勘探和深层物探技术进步做出了贡献,获省部级 特等奖1项、一等奖5项、二等奖7项,合著专著3部,发表论文30余篇,授 权中国发明专利8项。

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Dr. Qingcai Zeng 曾庆才 博士

*Dr. Qingcai Zeng (Technical Co-Chair)*, professor level senior engineer, graduate supervisor. His research interests include seismic data analysis, complex tectonic imaging and modeling, high-quality reservoir prediction and fluid detection and software development. He has been responsible for or participated in more than 30 national oil and gas major projects, PetroChina major projects and other topics. He has received 12 awards at provincial and ministerial levels, published more than 50 papers. 3 monographs and 18 authorized invention patents.

**曾庆才博士**,教授级高工,研究生导师。研究方向地震数据分析、复杂构造成像与建模、优质储层预测与流体检测和软件研发等方面研究。负责或参加了国家油气重大专项、中石油重大专项等课题30多项。获省部级以上奖励12项,发表论文50余篇,专著3部,授权发明专利18件。



Dr. Xianhuai Zhu 朱宪怀 博士

*Dr. Xianhuai Zhu (Technical Co-Chair)* has more than 30 years of both oil and service company experience. He has served multiple companies including Anadarko, PGS, Fusion Petroleum Technology, and ConocoPhillips. In 2016, Dr. Zhu founded Forland Geophysical Services Company (FGS), focusing on and committed to developing and applying advanced seismic data acquisition, imaging, and interpretation technologies for land.

Dr. Zhu served as the President of the Chinese American Petroleum Association (CAPA) in 2012 and was awarded the SEG Reginald Fessenden Award in 2012. He served as a director-at-Large of the SEG Board of Directors from 2014 to 2017, the First Vice Chairman of Geophysical Society of Houston (GSH) from 2017 to 2018 and was awarded the SEG Lifetime Membership Award in 2018. Since 2019, he has been an adjunct professor at Southwest Petroleum University and won the SEG Virgil Kauffman Gold Medal in 2022.

Dr. Zhu pioneered the method tomostatics and joint tomography imaging, which effectively improves the accuracy of near surface velocity modeling and is of crucial significance for onshore depth imaging under complex near-surface conditions.

朱宪怀博士拥有30余年的资深行业经验,曾服务于阿纳达科石油公司、PGS、Fusion Petroleum Technology 公司、康菲石油等多家公司。2016年,朱博士创立富兰国际勘探技术公司 (FGS),关注并致力于开发和应用先进的地震数据采集、成像和解释技术。

朱博士2012年任美国华人石油协会 (CAPA)会长,同年获SEG雷吉诺德·范信达奖,2014-2017年任SEG董事会董事,2017-2018年任休斯敦地球物理学会 (GSH)第一副主席,2018年获SEG终身会员奖,2019年至今在西南石油大学担任兼职教授,2022年获SEG维吉尔·考夫曼金奖。

朱博士开创性地提出层析静校正和联合层析反演成像方法,有效提高近地表速度建模精度,对复杂地表条件下的陆上深度成像具有至关重要的意义。

#### KEYNOTE PRESENTATION 3 特邀报告三

Title: Seismic imaging under complex surface conditions in Tarim Basin

Time: 10:05-10:30, Tue/4 June 2024

Speaker: Xianhuai Zhu, Forland Geophysical Services Company (FGS)

题目: 塔里木复杂地表条件下的地震成像

时间: 2024年6月4日, 周二, 10:05-10:30

讲者: 朱宪怀, 富兰国际勘探技术(北京)有限公司 (FGS)

2024 SEG 1st Tarim Ultra-Deep Oil & Gas Exploration Technology Workshop





Prof. Zhaoyun Zong 宗兆云 教授

Prof. Zhaoyun Zong (Technical Co-Chair) Ph.D. Supervisor, Dean of School of Geosciences. He was awarded the national high-level talent program. Young scholars of 'Cheung Kong Scholars Programme', and won the second prize of the National Science and Technology Progress Award (ranking: 3) and many other awards. The main research interest is oil and gas reservoir geophysics, which has characteristics in seismic rock physics, pre-stack seismic inversion, reservoir prediction and other aspects. As the first or corresponding author, he has published more than 100 papers in famous journals such as 'Surveys in Geophysics' and 'Geophysics'.

宗兆云教授,博士生导师,现任地球科学与技术学院院长。入选国家高层次 人才计划、教育部"长江学者奖励计划"青年学者等。获国家科技进步奖二 等奖等多项奖励。主要研究方向为油气储层地球物理,在地震岩石物理、叠 前地震反演、储层预测等方面研究有特色。第一或通讯作者在《Surveys in Geophysics》、《Geophysics》等著名期刊发表SCI论文100余篇。

# **ORGANIZING COMMITTEE**

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VICE-CHAIRMAN: Nianmin Guo, Ganglin Lei

#### MEMBERS OF ORGANIZING COMMITTEE:

Feixu Chen, Suo Cheng, Wensheng Duan, Bing Fang, Hongliang Gao, Youhui Huang, Jun Shi, Xingjun Wang, Youjun Xiao, Kaichi Xu, Hui Zhang, Ruirui Zhao, Duoming Zheng, Yi Zhou, Yong Zhou

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Xukui Feng BGP Inc., CNPC

Sam Grav CGG

**Guanamin Hu** University of Electronic Science and Technology of China

Jianping Huang China University of Petroleum (East China)

Tianyue Hu Peking University RIPED PetroChina Yina Hu

Yang Liu China University of Petroleum (Beijing)

**Scott Mackay** MacKay Consulting, Inc.

Chengbin (Chuck) Peng Cloudstream Medical Imaging

Qi Ran Southwest Oil and Gas Field Company, PetroChina

**Christof Stork** Land Seismic Noise Specialists

**Furong Wu** Southwest Geophysical Research Institute, BGP China University of Petroleum (East China) Xingyao Yin

Zhou (Joe) Yu HuiQuan Geophysical Services

James Zhang SI B

符力耘 中国石油大学(华东)

冯许魁 中石油东方地球物理勘探有限责任公司

Sam Gray CGG

电子科技大学 胡光岷

黄建平 中国石油大学(华东)

胡天跃 北京大学

胡英 中石油勘探开发研究院 刘 洋 中国石油大学(北京) **Scott Mackay** MacKay Consulting, Inc.

彭成斌 云流医学成像

冉 崎 中石油西南油气田公司

**Christof Stork** Land Seismic Noise Specialists

巫芙蓉 中石油东方地球物理公司西南物探研究院

印兴耀 中国石油大学(华东) 于 舟 汇泉地球物理服务

张厚柱 斯伦贝谢

> Above names are listed in alphabetical order. 以上按姓氏音序列

2024 SEG 1st Tarim Ultra-Deep Oil & Gas Exploration Technology Workshop



**KEYNOTE PRESENTATION 1** 

Title: Deep geological target-oriented seismic acquisition

Time: 09:15-09:40, Tue/4 June 2024

Speaker: Li-yun Fu, China University of Petroleum (East China)

#### **Speaker Biography**



Li-Yun Fu, Professor in Geophysics, China University of Petroleum (East China). After receiving the BS (1985) in geophysics from Chengdu College of Geology, Li-Yun Fu commenced his research career with China Offshore Oil Exploration & Development Research Center, CNOOC. He obtained his MS (1992) and PhD (1995) in geophysics at China University of Petroleum, Beijing. From 1995 to 1997, he was a postdoctoral fellow in engineering mechanics. Tsinghua University, Beijing. In 1997, Li-Yun Fu moved to Institute of Tectonics, University of California, Santa Cruz as a researcher. He joined Australia CSIRO in 1999 as a scientist staff, In 2004, Li-Yun Fu moved to Institute of Geology and Geophysics, Chinese Academy of Sciences and head the seismology group. In 2017, he joined School of Geosciences, China University of Petroleum (East China). He is a member of SEG, EAGE, AGU, and SSA. He has authored and co-authored more than 300 articles in academic journals. His research interests include wave propagation, regional seismic facies, rugged surface statistics and response characteristics, strong ground motions, seismic acquisition, seismic modeling, complex structure imaging, nonlinear seismic inversion, reservoir prediction, and high-temperature/ pressure rock physics. Dr. Fu is a member of Society of Exploration Geophysicists (SEG), European Association of Geoscientists and Engineers (EAGE), American Geophysical Union (AGU), and Seismological Society of America (SSA).

#### **KEYNOTE PRESENTATION 2**

Title: 3D multiple attenuation using trained dictionaries

Time: 09:40-10:05, Tue/4 June 2024

Speaker: Zhou (Joe) Yu, HuiQuan Geophysical Services

#### **Speaker Biography**



*Dr. Zhou Yu*, received a B.S. (1983) in marine geophysics from Ocean University ('83; Qingdao, China), a M.S.in geophysics from MIT ('96; Boston, MA) and a Ph.D. in geophysics from The University of Texas at Dallas ('01; Dallas, TX). Zhou has pioneered several wavelet-transformed based seismic data processing and non-intrusive corrosion detection tools over his 30+ year career in both industry and academia. Most recently, he worked in BP's Advanced Seismic Imaging group in the Upstream Technology organization for 20+ years. Zhou's interests lie in developing innovative solutions to various signal process and analysis problems, including Kirchhoff migration operator anti-aliasing, 3D/2D land/VSP/DAS/OBN/ISS data denoise process, 3D multiple attenuation, 3D/4D/5D conditioning data for AVO analysis, 3D inverse-Q seismic and 4D seismic process. He has published 20+ papers in peer-reviewed journals. He retired from BP in 2021 and has been an independent consultant since then.

Dr. Yu has designed and built Wavelet-Transformed based System (WTS) for seismic processing. Developed and implemented 100+ computer modules in seismic process WTS, which has been applied successfully to various seismic imaging projects, including OBN, Land, DAS, high-density ISS, and streamer. Features of WTS include automatic (minimum human interference), adaptive, efficient, effective and fast turnaround.

2024 SEG 1st Tarim Ultra-Deep Oil & Gas Exploration Technology Workshop

## 2024 SEG 第一届塔里木超深油气物探技术研讨会

#### **KEYNOTE PRESENTATION 4**

Title: Targeted methods and technologies for seismic wave imaging processing in deep and

ultra deep oil & gas exploration Time: 10:30-10:55, Tue/4 June 2024

Speaker: Huazhong Wang, Tongji University

#### Speaker Biography



Hua-zhong Wang, Professor, at the School of Ocean and Earth Sciences, Tongji University, obtained his doctoral degree from Tongji University in 1997. Professor Wang Huazhong has been engaged in theoretical and methodological research on seismic wave propagation, seismic data analysis, migration, and inversion for a long time. Main academic contributions include: ① The theoretical framework of characteristic wave inversion imaging was proposed, and the difference measurement concept of "same cause effect" was proposed. The strong nonlinear FWI was divided into a series of convex quasi-linear inverse problems, which promoted the practicality of FWI in onshore seismic data processing; ② A technical route for multi-information-fusion broadband wave impedance modeling and a new concept of "amplitude-preserving, quantitative and having weak sidelobes"reflectivity imaging have been proposed. The problem of broadband wave impedance reconstruction has been transformed into a multi-information -fusion constraint optimization problem. All this promote the transformation of seismic wave imaging from structural imaging to lithological imaging; ③ A technical route has been proposed for seismic exploration in the foothill area, which focuses on seismic data preprocessing with high wavenumber inter-channel time difference correction as the core, the reasonable datum choosing, and full depth domain seismic wave imaging.

#### **KEYNOTE PRESENTATION 6**

Title: Technical challenges, research progress and prospects of ultra-deep carbonate reservoir

characterization in Tarim Basin Time : 11:50-12:15, Tue/4 June 2024

Speaker: Jianhua Geng, Tongji University

#### Speaker Biography



Jianhua Geng is currently a distinguished senior professor, the director of the academic committee, the head of geophysical committee of the School of Ocean and Earth Sciences of Tongji University, and the leader of the geophysical exploration technology team of Shanghai Peak Disciplines. He is also a special allowance expert of the State Council. He is in charge of a number of scientific research projects including key projects of the National Natural Science Foundation, National Key Research and Development Program and has made big progresses in reservoir geophysics, high-temperature and high-pressure rock physics, ocean bottom nodes seismic exploration. He is a member of the board of the Chinese Geophysical Society (CGS), the director of the rock physics committee of the CGS, the deputy director of the academic committee of the national geophysical field observation station, Sheshan, and a member of the scientific evaluation panel of the International Ocean Discovery Program (IODP).

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### 2024 SEG 第一届塔里木超深油气物探技术研讨会

#### **KEYNOTE PRESENTATION 7**

Title: Permeability prediction technology from seismic data

Time: 12:15-12:40, Tue/4 June 2024

Speaker: Shangxu Wang, China University of Petroleum (Beijing)

#### **Speaker Biography**



Shang-xu Wang, Professor, works at China University of Petroleum (Beijing). He has established the first stress-strain based experimental apparatus in China, which extended rock physics experiments performed from ultrasonic band to seismic band, and hence pioneering a new field of seismic rock physics in China. In addition, Professor Wang broke through the 1/4-wavelength seismic resolution limitation of traditional theory, and developed a new technology for exploration of lithological reservoirs. This fills the technological gap in China's petroleum industry. and also has the great significance of "being one of the top ten powerful tools in China's petroleum engineering technology, and very significant to improve the corresponding supporting capability and service level". Professor Wang has published 213 academic articles with 1798 SCI citations, and obtained 29 invention patents and 14 software copyrights. He has been awarded 2 second prizes for National Science and Technology Progress, and is the chief scientist of 2 national "973" projects and the project leader of a "National Key R&D Program". Professor Wang has also established and presided over the CNPC Key Laboratory of Geophysical Exploration and the Sinopec Oil Reservoir Comprehensive Geophysical Research Center

#### **KEYNOTE PRESENTATION 8**

Title: Integrated testing technology and application of high temperature and high-pressure rock

physics for ultra-deep reservoirs Time: 12:40-13:05, Tue/4 June 2024

Speaker: Weihua Liu, Geophysical Experiment Center, Sinopec Geophysical Research Institute

#### Speaker Biography



Wei-hua Liu is currently the director of the Geophysical Experiment Center of the Sinopec Petroleum Geophysical Technology Research Institute, a senior engineer, and a member and deputy secretary-general of the Rock Physics Committee of the Chinese Geophysical Society. He is also a director of the Jiangsu Provincial Geophysical Society. He graduated from the Graduate School of the Chinese Academy of Sciences in 2006 with a Master's degree in Solid Geophysics. He mainly engages in basic research and application of geophysics in the energy field, including seismic rock physics, seismic forward modeling and wave propagation mechanism, reservoir prediction, fluid identification, and other research work. He actively promotes the continuous progress of basic research and experimental technology of geophysics in deep-earth areas. He has built a super-high temperature and high-pressure rock physics experimental platform and a high-resolution rock physics multi-parameter comprehensive test and analysis system for deep-earth engineering. He has organized the research and development of laser ultrasonic seismic physical model experimental technology and 3D high-precision discontinuous Galerkin finite element method seismic numerical simulation technology. He has presided over, undertaken, and participated in more than 30 national projects, Sinopec basic forward-looking and technological breakthroughs, production applications, and other projects, and has won scientific and technological awards from the provincial and department levels for many times.

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## 2024 SEG 第一届塔里木超深油气物探技术研讨会

#### **KEYNOTE PRESENTATION 9**

Title: Experimental study on acoustic and electrical dispersion of limestone and dolomite and its application in reservoir prediction

Time: 13:05-13:30, Tue/4 June 2024

Speaker: Jianguo Zhao, China University of Petroleum (Beijing)

#### **Speaker Biography**



*Jian-guo Zhao* is a professor at the Department of Geophysics, China University of Petroleum (Beijing). He got bachelor and master degrees from Department of Geophysics in Jilin University in 1998 and 2002, respectively, and he got his PhD from Tohoku University, Japan in 2006. He started his career at the Department of Geophysics in China University of Petroleum, Beijing. He published tens of papers in international journals and is a principal investigator for more than twenty projects including five NSFC (National Natural Science Foundation of China projects).

His current research focuses on Multi-band experimental and theoretical seismic rock physics aiming at reservoir prediction and fluid identification. To this end, His laboratory has developed systematic measurement techniques to investigate the elastic properties of partially saturated rock, which cover seismic frequency range to ultrasonic range. The multi-frequency measurement techniques provide great potential to clarify the features of wave dispersion and attenuation in the reservoir rock from seismic to ultrasonic frequency range, especially due to the presence of fluid. Two devices involved in the direct low-frequency measurement techniques are differential acoustic resonance spectroscopy and stress-strain measurement system based forced oscillation method, respectively. His research interests include seismic modeling, computational electromagnetics GPR and borehole radar applications in petroleum and civil engineering, artificial intelligence applications in geosciences and civil engineering as well.



	Monday, 3 June R & D Center of Tarim Oilfield Company
08:00 - 19:30	Onsite Registration
10:30 - 13:30 16:30 - 19:30	Pre-workshop Short Course: Shallow-to-Deep Seismic Imaging under Complex Near-surface Conditions
13:30 - 15:30	Lunch
18:00 - 19:00	Session Chair Meeting
19:30 - 21:00	Dinner

	Tuesday, 4 June		
09:00 - 13:30	Opening & Plenary Session Session Chairs: TBD Location: Lecture Hall, R & D Center of Tarim Oilfield Company		
09:00 - 09:15	Welcome addresses from organizers		
09:15 - 09:40	Invited Keynote 1: Deep geological target-oriented seismic acquisition by Li-yun Fu, from China University of Petroleum (East China)		
09:40 - 10:05	Invited Keynote 2: 3D multiple attenuation using trained dictionaries by Zhou Joe Yu from HuiQuan Geophysical Services		
10:05 - 10:30	Invited Keynote 3: Seismic imaging under complex surface conditions in Tarim Basin by Xianhuai Zhu, from Forland Geophysical Services Company (FGS)		
10:30 - 10:55	Invited Keynote 4: Targeted methods and technologies for seismic wave imaging processing in deep and ultra deep oil & gas exploration by Huazhong Wang, from Tongji University		
10:55 - 11:20	Invited Keynote 5: Exploration of deep geophysical imaging and target characterization technologies by Xuri Huang, from Southwest Petroleum University		
11:20 - 11:50	Workshop Group Photo, Coffee Break		
11:50 - 12:15	Invited Keynote 6: Technical challenges, research progress and prospects of ultra-deep carbonate reservoir characterization in Tarim Basin by Jianhua Geng, from Tongji University		
12:15 - 12:40	Invited Keynote 7: Permeability prediction technology from seismic data by Shangxu Wang, from China University of Petroleum (Beijing)		
12:40 - 13:05	Invited Keynote 8: Integrated testing technology and application of high temperature and high-pressure rock physics for ultra-deep reservoirs by Weihua Liu, from Geophysical Experiment Center, Sinopec Geophysical Research Institute		
13:05 - 13:30	Invited Keynote 9: Experimental study on acoustic and electrical dispersion of limestone and dolomite and its application in reservoir prediction by Jianguo Zhao, from China University of Petroleum (Beijing)		



40.00 45.00	Location		
13:30 - 15:30 16:10 - 17:50	Session 1: Theory and methods of ultra-deep seismic detection Session Chairs: TBD Location: Lecture Hall	Session 2: Ultra-deep land seismic acquisition technology (including near surface) Session Chairs: TBD Location: Meeting Room 2A	Session 3: Ultra-deep fidelity denoising and weak signal recovery technology Session Chairs: TBD Location: Meeting Room 2C
16:10 - 16:30	Three-dimensional seismic forward modeling and analysis of influencing factors on deep imaging in the piedmont southwestern Tarim Basin Chunming Wang¹,², Xiaohong Cheng¹, Qingcai Zeng², Sian Hou², Gengxin Peng³, Junru Jiao4, Shijun³ and Xianhuai Zhu⁴ 1 China University of Petroleum, Beijing 2 Research Institute of Petroleum Exploration and Development, Petrochina 3 Tarim Oilfield Company, PetroChina 4 Forland Geophysical Services	Research on the Lack of High Frequency Phenomenon in Seismic Signals in Tarim Oilfield Pei Guangping, Deng Jianfeng, Chen Feixu, Wang Guowei, Wang Xingjun. Researth Institute of Exploration and Development, Tarim Oilfield Company, Petrochina, Korla, China	Scattered Noise Suppression Based on the Double-Focusing Method Tianjing Shen*1, Yezheng Hu 1, Xuri Huang 1, Xiaochun Chen1 1. School of Geosciences and Technology, Southwest Petroleum University, Chengdu, 610500, China
16:30 - 16:50	Structure-Oriented Mapping of the Sub-Salt Fractured Reservoir by Reflection Layer Tomography from a Perspective of the Zero-Offset Vertical Seismic Profiling Jingjing Zong*, Cai Lu*, Guangmin Hu* and Yukai Wo**  *University of Electronic Science and Technology of China **Southwest Petroleum University	Exploration and Application of Node collection technology in Mountainous Areas of the Tarim Basin  LUO Wen*, ZHANG Xiaobin, YUAN Guangyin, JING  Longjiang, SU Jiaxi, YUAN  Bin, GEN Chun  Souhwest Geophysical  Branch, BGP Inc., CNPC	Application of Yu's wavelet filtering and SVI technique in Kuche mountain seismic data Zhongbo Xu¹*, Liansheng Liu², Duoming Zheng¹, Wensheng Duan¹, Jian Li², Qingning Dang¹ 1 Tarim Oilfield Company, CNPC, Korla, China 2 PanImaging Software Development Ltd., Beijing, China

16:50 - 17:10	Physical modeling of strike-slip fault and seismic response characteristics analysis Wenpeng Si*, Tingdong Xing, Shigui Xue, Linwei Ma SINOPEC Geophysical Research Institute Co., Ltd, Nanjing 211103, China	Essential technologies of vibroseis for ultra-deep fault-controlled fracture-cavity reservoirs in the desert area of Tarim Basin  Wei Yang¹.²*, Xuehua Chen¹, Liangjian Ni², Zichuan Yang² 1 State Key Laboratory of Oil & Gas Reservoir Geology and Exploitation, Chengdu University of Technology. 2 Northwest Oilfield Branch, Sinopec.	Super-Long-Offset Experiment for Velocity Model Building Ruirui Zhao*, Gengxin Peng, Dajun Li, PetroChina Tarim Oilfield Company Xianhuai Zhu, Kun Xu, Yan Illiescu, Forland Geophysical Services
17:10 - 17:30	Forward Simulation Study of Viscoelastic Media in the Tarim Basin Yezheng Hu*1, Tianjing shen1, Yukai Wo1, Guangping Pei2, Xuri Huang1. 1 School of Geosciences and Technology, Southwest Petroleum University, Chengdu, 610500, China. 2 Tarim Oilfield Company, PetroChina, Korla, Xinjiang 841000, China	Research and application of the joint surface modeling in the huge-thick loess area in southwest Tarim  Lv Jingfeng¹*, Zhang Xiaohua¹, Chen Feixu², Di Jiangwei¹, Chen Jingguo ¹,³, Cui Yongfu² 1 BGP,CNPC, Korla, Xinjiang 2 CNPC Tarim Petroleum, 3 CUP, Beijing	Research and application of inverse scattering series method to predict internal multiples  Xiang Pingao*1.2, Zhao Ruirui1.2, Li Yongjun1.2, Zhang Chunbo1.2, Wang Guowei1.2 1 Research Institute of Exploration and Development, Tarim Oilfield Company, PetroChina 2 R & D Center for Ultra-Deep Complex Reservoir Exploration and Development, CNPC)
17:30 - 17:50	High-precision irregular surface seismic wavefield simulation and imaging verification: The three-dimensional case Xiang Li*, Ziduo Hu, Yancan Tian, Wei Liu, Linghe Han, Key Laboratory of Reservoir Characterization, Research Institute of Petroleum Exploration and Development-Northwest, PetroChina, Lanzhou, Gansu, China; Gang Yao, Unconventional Petroleum Research Institute, China University of Petroleum (Beijing), Beijing, China.	Application of the "WBH" Acquisition Technology in Ultra Deep Oil and Gas Exploration in Jilin Exploration Area Chunbo Luo*, Peiying Cai, Shenghua Yu, Cuiye Huang, Fucheng Zhao, Guojun Chen. BGP, CNPC	Diffraction separation using envelop and optimized stacking Wentao Mu*, Weiyi Zhang, Jianlei Zhang, Zhenping Tian. BGP, CNPC



17:50 - 18:10	Poster Session A: Prediction of techniques Session Chairs: TBD	f ultra-deep heterogeneous reser	voirs & hydrocarbon detection
17:50 - 17:55	Application of Carbonate Rock Physics Analysis in Pre-stack Reservoir Prediction Yongqiang Ma, Lanmei Ke, Liuxin Yang, Long Yin, Zhao Ding. Sinopec Geophysical Research Institude	Prediction methods and application effects of ultradeep carbonate reservoirs in the Kedong of the western Kunlun mountain front zone Fei Peng¹*, Li Qiang¹, Chen Xiangfei¹, Liu jun¹, Bai Xue¹, Wang Yueming¹, Du hai² 1 Tarim Institute of Geophysical Exploration. BGP inc. CNPC 2 Tarim Southwest Exploration and Development Company, Tarim Oilfield Company, PetroChina)	
17:55 - 18:00	Strike-slip fracture parameters extraction based on optimal attribute weighted learning method Yongqiang Ma, Ruyi Zhang, Shangfeng Yang, Liuxin Yang. SINOPEC Geophysical Research Institute Co., Ltd.	Strata information guided amplitude gradient attribute and the identification of ultra-deep carbonate fault-controlled reservoir seismic reflection in Shunbei, Tarim Basin Kangkang Guo*, Yingtao Li, Shang Deng, Jibiao Zhang, Tieyi Wang and Dawei Liu, Petroleum Exploration and Production Research Institute, Sinopec, Beijing, China.	
18:00 - 18:05	Application of Chirplet-W transform time-frequency analysis technology in prediction of carbonate fault controlled fracture cave reservoir in Shunbei 8 well area, Tarim Basin Gao Lijun <sup>1,2</sup> , Li Haiying <sup>2</sup> , Gong Wei <sup>2</sup> , Fu Liyun <sup>1</sup> 1 School of Earth Science and Technology, China University of Petroleum (East China)	Application of pre-stack anisotropic fracture detection technique to ultra-deep reservoir prediction in the Dengying Formation, Central Sichuan  Yan Yuanyuan <sup>1,2*</sup> , Ran Qi <sup>1</sup> , Chen Kang <sup>1</sup> , Yang Guangguang <sup>1</sup> , Dai Juncheng <sup>1</sup> , Xi Cheng <sup>1</sup> , Lv Yan <sup>1</sup> , Weiwei <sup>1</sup> 1 Institute of Exploration and Development, PetroChina	

	2 Exploration and Development Research Institute of Sinopec Northwest Oilfield Branch	Southwest Oil and Gas Field Company. 2 Institute of Sedimentary Geology, Chengdu University of Technology)	
18:10 - 19:30	Session 4: Theory and methods of ultra-deep seismic detection Session Chairs: TBD Location: Lecture Hall	Session 5: Ultra-deep land seismic acquisition technology (including near surface) Session Chairs: TBD Location: Meeting Room 2A	Session 6: Ultra-deep fidelity denoising and weak signal recovery technology Session Chairs: TBD Location: Meeting Room 2C
18:10 - 18:30	3D omnidirectional local Angle domain wave field separation and imaging technology Hong He <sup>1,2</sup> , Xuefei Yang <sup>1</sup> , Bo Wang <sup>2</sup> 1 School of Geoscience and Technology, Southwest Petroleum University, Chengdu, 610500 2 CNPC Chuanqing Drilling Engineering Company Limited, Chengdu, 610051	Application of high-efficiency vibroseis acquisition technology in ultra-deep seismic exploration of Tarim basin Guangyin Yuan <sup>*1</sup> , Hongyuan Li², Bing Yuan¹, Jianwei Li¹, Youhui Huang³ 1 Southwest Geophysical Exploration Branch, BGP inc., CNPC 2 Acquisition Technology Institute, BGP inc., CNPC. 3.Exploration Utility Department, Tarim Oilfield Company, PetroChina.	Research on ultra-deep internal multiple suppression method for land seismic data Xie Junfa*, Liu Wenqing, Wang Jing, Wang Yanxiang, Jin Baozhong. (Northwest Branch Institute, Research Institute of Petroleum Exploration and Development, CNPC, Lanzhou, China)
18:30 - 18:50	Seismic physical modeling technology using laser ultrasonics for land seismic exploration  Xue Shigui*, Xing Tingdong, Wang Huiming, Si Wenpeng, and Jiao Yanyan, SINOPEC Geophysical Research Institute Co., Ltd.	The seismic acquisition for the ultra-deep Carboniferous insider imaging in northern Xinjiang Xia Jianjun*, Zhang Lulu, Guo Zaiping, Peng Xia. BGP, CNPC	High Fidelity Processing Strategy Targeting Deep Ordovician Carbonate Reservoirs in Northern Tarim Basin Duan Wensheng¹, Li Rong², Zhao Ruirui¹, Gong Zijing², Yang Shanshan¹, Liu Huafeng²*, Cui Jie² 1 Tarim Oilfield Company, PetroChina 2 Schlumberger



18:50 - 19:10	A Study of Seismic Simulation and Response Characteristics based on An Ultra-Deep Fault-related Reservoir Model Dechao Han*, Chonghui Suo, Li Yang, Weihua Liu, Lingwei Ma, Hongyan Li, Yuan Yuan, Lin Song, Chunli Zhang. SINOPEC Geophysical Research Institute Co. Ltd., Nanjing, 211103, China. SINOPEC Key Laboratory of Geophysics, Nanjing, 211103, China	Discussion on preprocessing of downhole data in near surface attenuation survey Gengxin Peng, Tarim Oilfield; Degang Jin*, BGP; Qiang Zou, Tarim Oilfield; Ruirui Zhao, Tarim Oilfield; Dajun Li, Tarim Oilfield; Zhong Li, BGP	A Multi-resolution Deep Learning Denoising Method for Surface Shot Gather Acquired from Tarim Basin Xintong Dong*1.2, Jun Lin1.2, Ming Cheng2, Hongzhou Wang2, Shiqi Dong3, Yuqin Luo4 1 Southern Marine Science and Engineering Guangdong Laboratory (Zhanjiang) 2 College of Instrumentation and Electrical Engineering, Jilin University 3 The Key Laboratory of Modern Power System Simulation and Control & Renewable Energy Technology, Ministry of Education, Northeast Electric Power University 4 Institute of Materials Physics, Northeast Electric Power University
19:10 - 19:30	Seismic physical modeling study about the fault core-damage zone of the strike-slip fault  XING Tingdong <sup>1,2</sup> , XUE Shigui <sup>1,2</sup> , Liu Weihua <sup>1,2</sup> , Ma Lingwei <sup>1,2</sup> , Si Wenpeng <sup>1,2</sup> , Jiao Yanyan <sup>1,2</sup> , WANG Huiming <sup>1,2</sup> , LV Cheng <sup>1,2</sup> 1 SINOPEC Key Laboratory of Geophysics, Jiangsu, Nanjing 211103, China; 2 SINOPEC Geophysical Research Institute, Jiangsu, Nanjing 211103, China)	Application of low-frequency vibrator in exploration of ultra-deep fractured vuggy reservoirs Wang Yanfeng¹, Huang Youhui², Chen Xueqiang¹, Pei Guangping², Duan Mengchuan¹, Xu Kaichi², Zhang Yan¹ 1 BGP, CNPC, Korla, Xinjiang 2 CNPC Tarim Petroleum)	Post-stack weak signal recovery based on improved BM3D Kai Jiao, Mi Zhang* China University of Petroleum - Beijing at Karamay
19:30 - 20:30	Dinner		

	Wednesday, 5 June			
09:30 - 11:10	Session 7: Seismic and GEM techniques in ultra-deep wells Session Chairs: TBD Location: Lecture Hall	Session 8: Prediction of ultra-deep heterogeneous reservoirs and hydrocarbon detection techniques Session Chairs: TBD Location: Meeting Room 2A	Session 9: Ultra-deep velocity modeling and migration imaging technology Session Chairs: TBD Location: Meeting Room 2C	
09:30 - 09:50	Application of high precision gravity and magnetic in the study of strike-slip fault in Kubei-Kangcun area Zhao Wenju <sup>1*</sup> , Wang Yang <sup>2</sup> , Xu Kaichi <sup>2</sup> , Li Jianli <sup>2</sup> , Zhang Pengyue <sup>1</sup> 1 CNPC, BGP, Zhuozhou 2 CNPC, Tarim Oilfield, Korla	Seismic sedimentology study of facies and reservoir in a Cambrian carbonate platform-to-basin area, Tarim Basin, China: Inspiration from the Florida Keys  Zhaohui XU <sup>1*</sup> , Hongliu ZENG <sup>2</sup> , Suyun HU <sup>1</sup> , Junlong ZHANG <sup>3</sup> , Wei LIU <sup>1</sup> , Hongying ZHOU <sup>1</sup> , Debo MA <sup>1</sup> , Qilong FU <sup>2</sup> 1 PetroChina Research Institute of Petroleum Exploration and Development, Beijing 100083, China 2 Bureau of Economic Geology, Jackson School of Geosciences, The University of Texas at Austin, Austin 78713, USA 3 Research Institute of Petroleum Exploration & Development, PetroChina Daqing Oilfield Company, Daqing 163712, China	TTI Anisotropic First Arrival Tomography Inversion and Its Application in the XQ-3D dataset Haijun Yang¹, Liansheng Liu²*, Jian Li², Long Qin¹, Wenyang Li¹, Yongjun Li¹ 1 Tarim Oilfield Company, CNPC, Korla, China. 2 PanImaging Software Development Ltd., Beijing, China.	
09:50 - 10:10	Application of MT data in the study of ultra-deep basement structure of Precambrian in Tarim basin Wei Wei*, Tarim Oilfield, CNPC; Hu Zuzhi, BGP, CNPC; Zhang Zhen, Tarim Oilfield, CNPC; Zhang Hongqiang, Xu Shichao, Zhang Rongxin, BGP, CNPC	Al-based 3D Seismic Prediction of Ultra-deep Carbonate Karst Reservoir Case Study of Tazhong Area in Tarim Basin Wu Jiangyong¹, Wang Gaige²², Cheng Zhao¹, Tong Yanming², Zhou Jie¹, Wu Chuan², Li Shengqian¹, Yang Pin² 1 Tarim Research Institute of Petroleum Exploration & Development, Korla 2 Schlumberger Technology Service (Beijing) Co. Ltd)	Efficient pure qP-wave reverse time migration for tilted transversely isotropic media Jianping Huang*, Qiang Mao, Zixiao Zhang. Geosciences Department, China University of Petroleum (East China)	

10:10 - 10:30	Application of TFEM method in ultra-deep oil and gas exploration Sun Weibin*1, Li Dajun2, Xu Kaichi2, Li Jianli2, Xu Shichao1 1 BGP CNPC 2 Resource Exploration Department of Tarim Oil & gas Company	Prestack prediction techniques of ultra-deep heterogenous reservoir in Tarim basin Weijia Fan*, Jun Li, Chunyu Liu, Jianli Yang, Elsiwave Reservoir	Study on Low-relief structure imaging based on DWT and multi-well constraint joint modeling Li Li-sheng *, Ye Yue-ming, Zhang Ying, Wang Zhao-qi, Chen Jian-wei; Petrochina Hangzhou Research Institute of Geology
10:30 - 10:50	Application of 3D gravity, magnetic and MT methods in the exploration of complex foothill belt in Kuqa Depression Hu Zuzhi*, BGP, CNPC; Li Dajun, Li Jianli, Tarim Oilfield, CNPC; Zhang Pengyue, Liu Juan, Meng Cuixian, Shi Yanling, BGP, CNPC	Seismic response analysis of karst reservoirs: A case study on a typical carbonate-karst reservoir model of the Tarim Basin  Sheng Yang*1, Xuri Huang1, Wen Xiao2, Kai Li3, Yezheng Hu1 1 School of Geosciences and Technology, Southwest Petroleum University, Chengdu, 610500, China 2 Tarim Oilfield Company, PetroChina, Korla, Xinjiang 841000, China 3 SINOPEC Geophysical Research Institude Co.,Ltd, Nanjing, 211103, China)	Structure modeling technology based on well calibration and digital geological outcrops Wei Zhang¹, Ruiqing Hu¹*, Jiading Pei¹, Xiaoguang Liu¹ 1 BGP INC, CHINA NATIONAL PETROLEUM CORPORATION
10:50 - 11:10		A new seismic inversion method based on Bayesian GASA algorithm Heng Liu¹, Ruiqing Hu¹*, Qing Li¹, Kai Gao¹, Lu Yu¹ 1 BGP INC, CHINA NATIONAL PETROLEUM CORPORATION	Research and Application of Eigen Wave Based Stereo Tomography for Macro Velocity Inversion Sun Xiaodong*1,2, Li Aowei¹, Li Zhenchun¹, Zhao Liang¹ 1 National Key Laboratory of Deep Oil & gas, China University of Petroleum (East China), Qingdao, 266580, China 2 Shandong Provincial Key Laboratory of Reservoir Geology, China University of Petroleum (East China), Qingdao, 266580, China) Qingdao, 266580, China)

11:10 - 11:40	Poster Session B: Theory and methods of ultra-deep seismic detection, Ultra-deep fidelity denoising and weak signal recovery technology  Session Chairs: TBD		Coffee Break Location: Foyer Area
11:10 - 11:15	An experiment on surface monitoring for fracturing microseismic of an ultra-deep well  Wu Gang¹, Cai Jiang², Zhao YeWei³*, Liu MeiJuan¹, Wang Dan³, Liang BeiYuan⁴ 1 PetroChina HuaBei Oilfield, Renqiu, 065700, China 2 Test Branch of PetroChina BoHai Drilling, LangFang, 065007, China 3 ChenYu Group of PanJin Liaoyou, PanJin, 124011, China 4 Geolmage LLC, CA 94118, USA)	Broadband solutions for ultra-deep imaging: theory and experience in China and in the world Lv Shuying, Philippe Hermann, Nicolas Tellier, and Shuki Ronen*	
11:15 - 11:20	Variable frequency four-dimensional seismic technology Yang Xuefeng¹, Zhao Shengxian¹, Liu Shaojun¹, Li Guo², Li Zishun².³, Lei Yue¹ 1 Shale Gas Exploration and Development Research Institute of PetroChina Southwest Oil and Gas Field Branch 2 Naswi Petroleum Technology (Chengdu) Co., Ltd 3 Exploration and Development Research Institute of PetroChina Daqing Oilfield Co., Ltd)	Research and application of "3Q" high-resolution processing technology Yang Shanshan*1.2, Zhao Ruirui1.2, Jiang Yang1.2, Li Yongjun1.2, Sun Haijun1.2 1 Research Institute of Exploration and Development, Tarim Oilfield Company, PetroChina 2 R&D Center for Ultra-Deep Complex Reservoir Exploration and Development, CNPC	
11:20 - 11:25	5D Data Reconstruction in Radial Domain in DiBei area Dang QingNing, Duan WenSheng, Zuo AnXIn, Qin Long, Zhou Chang Tarim Oilfield Company, Korla, Xinjiang	Seismic multiple identification and suppression for ultra-deep hydrocarbon exploration: ZVSP case study Tengyu Wang*123, Hao Chen4, Ting Yan1.2, Zhen Zhang1,	



		Yang Wang¹, Luzhong Huang¹ 1 CNPC, Exploration and Development Institution of Tarim Oilfield 2 Xinjiang Key Laboratory of Ultra-deep Oil and Gas 3 R&D Center for Ultra-Deep Complex Reservoir Exploration and Development, CNPC 4 Chengdu AlWebest Technology Co., LTD	
11:25 - 11:30	High fidelity denoising technology for viberator in Shunzhong Desert of Tarim Basin Mo Yangang, Zhang Yuan, Liu Laixiang, Liu Zhiyuan (1.Sinopec Petroleum Exploration and Development Research Institute, 100020, Beijing, China)	Seismic data frequency improvement method based on LR neural network  Li* Hong, Cao Junxing,  College of Geophysics,  Chengdu University of  Technology, Chengdu  610059	
11:30 - 11:40	Discussion, Q & A		
11:40 - 13:20	Session 10: Ultra-deep land seismic acquisition technology (including near surface), Ultra-deep fidelity denoising and weak signal recovery technology  Session Chairs: TBD  Location: Lecture Hall	Session 11: Prediction of ultra-deep heterogeneous reservoirs and hydrocarbon detection techniques Session Chairs: TBD Location: Meeting Room 2A	Session 12: Ultra-deep velocity modeling and migration imaging technology Session Chairs: TBD Location: Meeting Room 2C
11:40 - 12:00	Key technologies and application effect for complex surface seismic acquisition in the Kuqa Depression of Tarim Basin He Wei*, Hu Shanzheng, Jing Longjiang, Geng Chun, Xiao Wei, Du Junguo, Liu Jun, Hu Qi. Southwest Geophysical Branch, BGP Inc., China National Petroleum Corporation.	Calculation of Natural Fractures within Carbonate Rock Formations by Using Continuum Damage Mechanics and Its Application in Shunbei Oilfield Xinpu Shen China University of Petroleum (Beijing), Beijing, China	Integrated Interpretation for Upholes and Small-refraction Data Based on Tomography Inversion Qiaoli Liang <sup>1*</sup> , Ganglin Lei <sup>2</sup> , Liansheng Liu <sup>2</sup> , Jingrong Lai <sup>2</sup> , Chang Zhou <sup>2</sup> , Yang Jiang <sup>2</sup> 1 Panlmaging Software Development Ltd., Beijing, China. 2 Tarim Oilfield Company, CNPC, Korla, China)

12:00 - 12:20	Analysis of factors related to acquisition for deep target exploration Rongwei Xu*, Huazhong Wang, Bo Feng, Chengliang Wu Wave Phenomena and Intelligent Inversion Imaging Group (WPI), School of Ocean and Earth Science, Tongji University, Shanghai, 200092, China	Highlighted ultra-deep seismic low-frequency components via the adaptive W transform Liyu Zhang*, Hanpeng Cai, Zhiwei Zhang, Wandi Ma. School of Resources and Environment, University of Electronic Science and Technology of China (UESTC). Mingjun Su, Cheng Yuan, Research Institute of Petroleum Exploration and Development-Northwest (NWGI), PetroChina.	Research and Application of Super deep "True" Surface Prestack Depth Migration Technology in Double Complex Area of the Southern Junggar Basin Chen Jianwei¹, Meng He¹, Chen Xiguang¹, Ye Yueming¹, Zhang Chunyan¹, Yao Maomin², Song Zhihua² 1 PetroChina Hangzhou Research Institute of Geology, Hangzhou 310023, China 2 PetroChina Xinjiang Oilfield Company, Karamay 834000, China)
12:20 - 12:40	Application of Compressed Sensing Technology in Seismic Data Processing: A Case Study Using Data from the Tarim Block Wang Deying <sup>1,2</sup> , Su Qin <sup>1,3</sup> , Zeng Huahui <sup>1</sup> , Zhang Kai <sup>2</sup> , Kou Long-jiang <sup>1</sup> , Jin Baozhong <sup>1</sup> 1 Research Institute of Petroleum Exploration & Development-Northwest (NWGI), PetroChina, Lanzhou City, Gansu Province, 730000 2 China University of Petroleum (East China), Qingdao City, Shandong Province, 266000 3 University of Electronic Science and Technology of China, Chengdu City, Sichuan Province, 610000)	Application of multi-attribute constrained prestack wide-azimuth fracture prediction technology in the Yingmai 2 area Yongjian Zeng, and Zhaoyun Zong, National Key Laboratory of Deep Oil and Gas, China University of petroleum (East China), Qingdao, China; Pilot National Laboratory for Marine Science and Technology, Qingdao, China; Tianwei Du*, Kunlun Digital Technology Co., Ltd, Beijing, China; Hongliang Gao, Yu Liu, and Meichun Yang, Exploration and Development Research Institute, PetroChina Tarim Oilfield Company, Xinjiang, China; Nan Yan, LunNan Oil and Gas Extraction Management Department, PetroChina Tarim Oilfield Company, Xinjiang, China.	Application of True Topography Reverse Time Migration in Western Sichuan YANG Tao*, TANG Dahai, WANG Xuli, RAN Lijun, HU Xin, SUN Zhijun, LIU Bai, XIE Geyun (Northwest Sichuan Gas Division, PrtroChina Southwest Oil and Gas Field Company, Jiangyou, Sichuan 6217412, China)



12:40 - 13:00	Removing anomalous noise from seismic data Xiaobin Li*, Qiaomu Qi, Chengdu University of Technology, College of Geophysics, Tengyu Wang, Tarim Oilfield Exploration and Development Research Institute, China National Petroleum Corporation, Dongjun Zhang, Shale Gas Research Institute, PetroChina Southwest Oil & Gas Field Company	Identify lens-shaped reef beach reservoirs By Broadband ultra highresolution seismic In Gucheng gas field of Tarim Basin  Li Zishun <sup>1,3</sup> , Wang Yuhua <sup>2</sup> ,  Li Qiang <sup>3</sup> , Li Zhenchun <sup>4</sup> ,  Sun Shan <sup>3</sup> , Xu Zhengwei <sup>5</sup> ,  Li Guo <sup>1</sup> 1. Naswe Petroleum Technology (Chengdu) Co. Ltd 2. PetroChina Oil and Gas and New Energy Company 3. Daqing Oilfield Exploration and Development Research Institute 4. China University of Petroleum (East China) 5. Chengdu University of Technology	Depth Migration Technology
13:00 -13:20	Q-factor estimation of Ultra- deep rock using inversion algorithm with power spectrum centroid frequency shift Guanlei Zhang*, Hanpeng Cai, Ting Chen, Jianqiang Huang. School of Resources and Environment, University of Electronic Science and Technology of China; Tengyu Wang, Zhen Zhang, Research Institute of Exploration and Development, Tarim Oilfield Company, PetroChina.		Velocity modeling of joint tomography with reflection and first-break in complex mountain areas and its application Chen Yangyang*1,2, Peng Gengxin¹1,2, Liu Zhengwen¹1,2, Zhao Ruirui¹1,2, Wu Yubing¹1,2, Zhao Yingjie¹1,2 1 Research Institute of Exploration and Development, Tarim Oilfield Company, PetroChina; 2.R & D Center for Ultra-Deep Complex Reservoir Exploration and Development, CNPC)
13:30 - 15:30	Lunch		
16:10 - 17:30	Session 13: Ultra-deep fidelity denoising and weak signal recovery technology, Ultra-deep velocity modeling and migration imaging technology Session Chairs: TBD Location: Lecture Hall	Session 14: Prediction of ultra-deep heterogeneous reservoirs and hydrocarbon detection techniques Session Chairs: TBD Location: Meeting Room 2A	Session 15: Ultra-deep velocity modeling and migration imaging technology Session Chairs: TBD Location: Meeting Room 2C

16:10 - 16:30	Reflection waveform inversion driven by least-squares redatuming for seismic imaging in ultra-deep oil and gas fields Jiubing Cheng*, Tengfei Wang, Sihai Wu, Feng Zhu and Jianhua Geng, School of Ocean & Earth Science, Tongji University	Full 3D Characterization of Ultra-deep Carbonate Fracture-cave System with Combined Al and Geomodelling Technology in Tarim Basin Cheng Zhao¹, Tong Yanming²*, Wu Jiangyong¹, Wu Chuan², Li Shengqian¹, Wang Gaige², Zhou Jie¹, Tang chenqing² 1 Tarim Research Institute of Petroleum Exploration & Development, Korla 2 Schlumberger Technology Service (Beijing) Co. Ltd.)	Three-Step Decoupling Solution for TTI Anisotropic First Arrival Tomography Inversion Jian Li <sup>1*</sup> , Gengxin Peng <sup>2</sup> , Liansheng Liu <sup>1</sup> , Xingjun Wang <sup>2</sup> , Yaotang Zhang <sup>2</sup> , Jingya Lu <sup>2</sup> 1 PanImaging Software Development Ltd., Beijing, China 2 Tarim Oilfield Company, CNPC, Korla, China)
16:30 - 16:50	Prestack Random and Coherent Noise Simultaneous Attenuation Based on 3D CWT Xiaokai Wang*, Dawei Liu, Wenchao Chen, Xi'an Jiaotong University, Xi'an, China Xiaohai Yang, Haibo Mao, PetroChina Xinjiang Oilfield Company, Urumqi, China	Structural Tensor-Based Active Contour Method for 3D Carving of Fractured-Cavity Reservoirs Siyao Li*1, Xuri Huang1, Shuhang Tang1 1 School of Geosciences and Technology, Southwest Petroleum University, China	A Multi-sensory Field Distillation Network for Seismic Velocity Model Building Jing Lu, Chunlei Wu*, Ran Li, Huan Zhang, Wenqi Zhao. College of Computer Science and Technology, China University of Petroleum (East China), Qingdao, China
16:50 - 17:10	Piedmont imbricated first break static correction and surface modeling method Kong Fanyong*, Xia Jianjun, Zon Simeng, Wang Liye, and Yu Jinlin. BGP, CNPC	Mesozoic Structure character of Yangxia sag, Kuqa Foredeep Ding Wei¹, Li Jibai²*, Zhou Xiongbo², Li Zhifang², Yang Qingdao², Li Hao², Luo Zhangqing², Liu Chuanshan², Hu Jianhui², Tan Daiyin², Chen Mingchun² 1 Northwest Oil-Field Company, SINOPEC, Ürümqi, Xingjiang 2 South branch of Sinopec geophysical company, Chengdu, Sichuan)	A Model Study about migration Velocity for Complicated Structures Zhang Shan, Nanjing Geoknower Technology Co., Ltd., China

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17:10 - 17:30	Karst reservoir characterization based on vertical seismic-profile data local full-waveform inversion  Kai Li <sup>1,2</sup> , Lixin Wang <sup>1</sup> , Xuri Huang <sup>2</sup> , Zhentao Sun <sup>1</sup> , Shan Zhou <sup>1</sup> and Xiaochun Chen <sup>2</sup> 1 SINOPEC Geophysical Research Institute Co., Ltd., China 2 School of Geoscience and Technology, Southwest Petroleum University, China	Crack detection for superdeep complex structure sandstone reservoirs with low porosity and low permeability from 3D seismic data  Jian Shikai*1.2.3.4, Peng Gengxin1.2.3, Fu Liyun4, Tang Yongliang1.2.3, Duan Wensheng1.2.3, Cheng Suo1.2.3, Zheng Duoming1.2.3, Tian Haonan1.2.3, Zhao Guang liang1.2.3, and Wang Xin1.2.3 1 Tarim Oilfield Company, CNPC, Korla, China 2 R&D Center for Ultra-Deep Complex Reservoir Exploration and Development Technology, CNPC, Korla, China 3 Engineering Research Center for Ultra-Deep Complex Reservoir Exploration and Development, Xinjiang, China 4 National Key Laboratory of Deep Oil and Gas, China University of Petroleum (East China), Qingdao, China	Revealing the reservoir underneath volcanic rocks and folding structures in the Liaohe basin  Botao Li¹*, Peipei Deng¹, Wei Yan¹, Qiwei Zou², Dongwei Zhang², Tong Bai², Kang Liu² 1 CGG 2 CNPC
17:30 - 17:50	Poster Session C: Ultra-deep migration imaging technolog Session Chairs: TBD		Coffee Break Location: Foyer Area
17:30 - 17:35	A finite-fifference-solved Q-compensated reverse time migration imaging method Jianping Huang*, Xinru Mu, China University of Petroleum (East China), Qingdao, China	The Application research of an integrated velocity modeling method Shuai Yan*, R & D Center of Science and Technology, Sinopec Geophysical Corporation	
17:35 - 17:40	Multi-focus imaging technology with a highly complex structure Zhang Liyan, Li Ang*, Yin Wen, Zhang Zhensheng, Du Shouying, Ren Yapeng. China University of Petroleum (Beijing) at Karamay, Karamay, 83400, Xinjiang, China	RTM of VSP data technique based on LS-SFD method Ruiqing Hu <sup>1*</sup> , Kai Gao <sup>1</sup> , Qing Li <sup>1</sup> , Yiming Zhang <sup>1</sup> , Longmei Li <sup>1</sup> 1.BGP INC, CHINA NATIONAL PETROLEUM CORPORATION	

17:40 - 17:45	Target-oriented Data-domain Least Squares Reverse Time Migration Kai Chen*, Yezheng Hu, Xuri Huang, Southwest Petroleum University	Key techniques and application of amplitude preserving and high resolution seismic data processing in dune area of the Maigaiti slope, Tarim Basin  Cui Lei, Chen Xiangfei*, Zhao Bo, Zhou Chenggang, Liu Jun, Chen Lu, Wang Chunyang, Liu Jun, BGP, CNPC	
17:45 - 17:50	Free Discussion, Q & A		
17:50- 19:10	Session 16: Reservoir prediction & detection techniques, Ultra-deep fidelity denoising and weak signal recovery technology Session Chairs: TBD Location: Lecture Hall	Session 17: Ultra-deep fidelity denoising and weak signal recovery technology, Ultra-deep velocity modeling and migration imaging technology Session Chairs: TBD Location: Meeting Room 2A	Session 18: Ultra-deep velocity modeling and migration imaging technology Session Chairs: TBD Location: Meeting Room 2C
17:50 - 18:10	Identification of ultra-deep fracture cavity using pre-stack seismic gradient-texture pattern constrained by stratigraphic structure Zhiwei Zhang*, Hanpeng Cai, Liyu Zhang, Yaojun Wang, School of Resources and Environment, UESTC. Kang Chen, Da Peng, Research Institute of Exploration and Development, Southwest Oil & Gas Field Company, PetroChina.	Application of 5D matching pursuit Fourier interpolation technology in complex mountain 3D seismic data processing  Junjie He¹, Ruiqing Hu¹*,  Xiaoli Zhang¹, Nengxue Gao¹,  Sining Zhang¹  1 BGP INC, CHINA  NATIONAL PETROLEUM  CORPORATION	Study on Velocity Modeling in Depth Domain of Double Complicated Region in Southwest Tarim Basin Jing Wang*, Jiaqing Sun, Shuhai Qie and Junfa Xie, Research Institute of Petroleum Exploration & Development-Northwest (NWGI), Petrochina
18:10 - 18:30	Application of Ocean Bottom Nodes Technology In The Prediction of Sub-salt Ultradeep Carbonate Reservoirs Chunyuan Bai¹, Yungui Xu*¹, Siwen Wang², Hongping Wang², Guoping Zuo², Xuri Huang¹ 1 School of Geoscience and Technology, Southwest Petroleum University, Chengdu, 610500, China 2 Petro China Hangzhou Research Institute of Geology, Hangzhou, 310023, China	Application high-resolution stacking imaging for ultra-deep exploration in Tarim Basin Chengliang Wu*1.2, Huazhong Wang1.2, Bo Feng1.2, Rongwei Xu2, Sheng Shen2, Longxiang Han2 1 State Key Laboratory of Marine Geology, School of Ocean and Earth Science, Tongji University, Shanghai 2 Wave Phenomena and Intelligent Inversion Imaging Group (WPI), School of Ocean and Earth Science, Tongji University, Shanghai,	High precision velocity modeling technology for Tarim deep fault controlled reservoirs  Zhang Yuan, Mo Yangang, Wei Zhefeng, Jiang Dajian, Liu Zhiyuan  1 Sinopec Petroleum  Exploration and Development Research Institute.Beijing 100020

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18:30 - 18:50	Vibroseis sweep signal design method based on customized high-resolution wavelet Zhenbo Nie*, Huazhong Wang, and Shen Sheng Wave Phenomenon and Intelligent Inversion Imaging group (WPI), School of Ocean and Earth Science, Tongji University, Shanghai, 200092, China.	A Near-Surface Q Value Prediction Method Based on Neural Network Algorithm Chaofeng Zhao*, Wei Zhang, Jianyu Zhao, Jiantao Tian, Yanjun Chen. BGP Inc., CNPC, Zhuozhou, Hebei, 072751, China	Application of different first- arrival tomography in thick undulating low-velocity layers Chen Lu¹, Zhang Yiming¹*, Hu Ruiqing¹, Gu Xiiaodi¹, Zhang Xiaoli¹, Gao Nengxue¹ 1 BGP INC, CHINA NATIONAL PETROLEUM CORPORRATION
18:50 -19:10	The application of facies controlled well-seismic joint Bayesian geo-modeling method to the Karst reservoirs of the Tarim Basin Zelei Jiang*1, Xuri Huang¹, Kai Li¹², Wen Xiao³, Yezheng Hu¹¹ School of Geosciences and Technology, Southwest Petroleum University, Chengdu, 610500, China 2 SINOPEC Geophysical Research Institute Co., Ltd, Nanjing, 21000, China 3 Research Institute of Exploration and Development, PetroChina Tarim Oilfield Branch Company. Korla, 841000, China)		Velocity fusion processing and trap implementation of pre-stack depth migration in kuqa area Wensheng Duan, Xingjun Wang, Jingrong Lai, Chang Zhou, Chao Chen Tarim Oilfield Company
19:10 -19:30	Closing Session: Conclusion Session Chairs: TBD	& Awarding	Location: Lecture Hall
19:30 - 20:30	Dinner		



#### 特邀报告一

题目: 深层地质目标导向地震采集

时间: 2024年6月4日, 周二, 09:15-09:40

讲者: 符力耘, 中国石油大学(华东)

#### 讲员介绍



符力耘,中国石油大学(华东)地球科学与技术学院教授,博士生 导师。长期从事理论地震学和勘探地震学基础与应用研究。研究兴 趣包括非均匀介质地震波传播积分方程半解析表征的理论方法,近 地表地震复杂性与强地振动;复杂介质高精度地震采集分辨理论, 三维观测系统深度延拓与"两宽一高"精度分析,地质目标导向地 震采集技术,深海宽频宽方位地震采集及鬼波压制;超广角傅里叶 传播算子与高陡构造地震成像及其复杂性定量分析, 速度场波数结 构及其拓扑标度分析,宽带阻抗反演与解释性地震成像技术;物理 嵌入深度学习与广义非线性地震反演;高温高压岩石物理,声弹与 孔声弹动力学理论及高压介质AVO方法,热弹与孔热弹动力学理论 及高温介质AVO方法,地层压力与温度广义非线性地震反演等。已 发表学术论文300余篇,获授权国家发明专利40余件。获国家杰出 青年基金(2009)。

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### 2024 SEG 第一届塔里木超深油气物探技术研讨会

#### 特激报告二

题目: 使用训练词典的三维多次波压制

时间: 2024年6月4日. 周二. 09:40-10:05

讲者: 干舟, 汇泉地球物理服务公司

#### 讲员介绍



干舟博士获中国海洋大学海洋地球物理学士学位('83:中国青岛). 麻省理丁学院地球物理硕士学位('96:马萨诸塞州波士顿), 德克 萨斯大学达拉斯分校地球物理博士学位('01:得克萨斯州达拉 斯)。在他30多年的工业和学术生涯中,周博士开创了几种基于小 波变换的地震数据处理和非侵入式腐蚀检测工具。他在BP英国石油 公司上游技术部门的高级地震成像小组工作了20多年。于博士的研究 兴趣在于开发各种信号处理和分析问题的创新解决方案,包括Kirchhoff 偏移算子抗混叠、3D/2D-land/VSP/DAS/OBN/ISS数据去噪过 程、3D多重衰减、用于AVO分析的3D/4D/5D条件数据、3D逆O地 震和4D地震过程。他在同行评审期刊发表20多篇论文。于博士于2021 年从英国石油公司退休,并自那时起作为独立顾问为业界提供技术 支持。

于博士设计并构建了基于小波变换的地震处理系统, 开发并实现了 地震过程WTS中的100多个计算机模块,已成功应用于各种地震成 像项目,包括OBN、Land、DAS、高密度ISS和拖缆。WTS的特点 包括自动(最小人为干扰)、自适应、高效、有效和快速周转。

#### 特激报告四

题目: 深层超深层油气勘探地震波成像处理针对性方法技术

时间: 2024年6月4日. 周二. 10:30-10:55

讲者: 王华忠, 同济大学

#### 讲员介绍



王华忠, 1997年获得同济大学博士学位。同济大学海洋与地球科学 学院教授。王华忠教授长期从事地震波传播、地震数据分析、地震 波偏移成像及反演成像的理论方法研究。①提出了特征波反演成像 方法理论体系,提出了"同因之果"差异度量思想,将强非线性的 全波形反演问题拆分为一系列凸性较好的拟线性反问题,促进了FWI 在陆上地震数据处理中的实用化;②提出了多信息融合宽带波阻抗 建模的技术路线及保直定量弱旁瓣反射系数地震波成像新概念,把 宽带波阻抗重构问题提成多信息融合约束优化问题,促进了地震波 成像中构造成像向岩性成像的转变: ③针对山前带地震勘探, 提出 了以高波数道间时差校正为核心的地震数据预处理+小平滑基准面+ 全深度域地震波成像的技术路线。

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## 2024 SEG 第一届塔里木超深油气物探技术研讨会

#### 特激报告六

题目: 塔里木盆地超深碳酸盐岩储层刻画技术挑战、研究进展与展望

时间: 2024年6月4日, 周二, 11:50-12:15

讲者: 耿建华, 同济大学

#### 讲员介绍



**耿建华**,现任同济大学长聘特聘教授。海洋与地球科学学院学术委 员会主任、地球物理学科委员会主任(责任教授)、上海市高峰学 科地球物理勘探技术高峰团队负责人,享受国务院政府特殊津贴专 家。主持完成了包括国家自然科学基金重点项目、国家重点研发计 划项目、国家863计划课题等在内的多个科研项目,在储层地球物 理、高温高压岩石物理、海底节点地震勘探等方面取得了重要的研 究讲展, 多次荣获省部级科技成果与人才培养奖励。现兼任中国地 球物理学会理事、中国地球物理学会岩石物理专业委员会主任、上 海佘山地球物理国家野外科学观测研究站学术委员会副主任、广东 省地球物理高精度成像技术重点实验室学术委员会委员、国际大洋 发现计划(IODP)科学评估工作组评审委员。

#### 特邀报告七

题目: 地震预测渗透率技术

时间: 2024年6月4日. 周二. 12:15-12:40

讲者: 王尚旭, 中国石油大学(北京)

#### 讲员介绍



王尚旭,中国石油大学(北京)教授。建立了我国首套应力应变岩 石物理实验装置,将岩石物理实验从超声频段推进到地震频段,在 我国开拓了地震频段岩石物理新领域:突破了 1/4 波长地震分辨率 局限的传统理论,研发了岩性油气藏地震勘探新技术,填补了我国 石油工业一项技术空白, "成为中国石油工程技术的十大利器之一, 对提高中国石油工程技术支撑能力和服务水平意义重大"。发表学 术论文213篇, SCI他引 1798次: 获发明专利 29 项、软件著作权 14 件;获国家科技进步二等奖 2 项,是两期国家"973"项目首席 科学家、一项"国家重点研发计划"项目负责人。建立并主持中国 石油物探重点实验室和中国石化油藏地球物理研究中心。

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## 2024 SEG 第一届塔里木超深油气物探技术研讨会

#### 特激报告八

题目: 超深层高温高压岩石物理实验技术及应用 时间: 2024年6月4日. 周二. 12:40-13:05

讲者: 刘卫华, 中石化南京物探院地球物理实验中心

#### 讲员介绍



刘卫华,现任中国石化石油物探技术研究院地球物理实验中心主任, 高级工程师,中国地球物理学会岩石物理专委会委员和副秘书长, 汀苏省地球物理学会理事。2006年毕业于中科院研究生院固体地 球物理专业, 理学硕士学位。主要从事能源领域地球物理基础研究 与应用,包括地震岩石物理、地震下演模拟与波传播机理、储层预 测与流体识别等研究工作。积极推动深部领域地球物理基础研究与 实验技术的持续进步,建成面向深地工程的超高温高压岩石物理实 验平台和高分辨率岩石物理多参数综合测试分析系统,组织研发激 光超声地震物理模型实验技术和三维高精度间断伽辽金有限元法地 震数值模拟技术,主持承担和参与国家项目、中石化基础前瞻与科 技攻关、生产应用等各类项目30余项,多次获得省部级和局级科技 奖励。

#### 特激报告九

题目: 灰岩与白云岩的声电频散实验研究与储层预测中的应用

时间: 2024年6月4日. 周二. 13:05-13:30

讲者: 赵建国、中国石油大学(北京)

#### 讲员介绍



赵建国, 教授, 博导。1994年9月—1998年7月在长春地质学院学 习,获应用地球物理系学士学位,1998年7月—1999年8月在松辽 委东北勘测设计研究院工作,1999年9月—2002年7月在吉林大学 (原长春地质学院)学习,获固体地球物理学理学硕士学位,2002 年9月—2006年4月在日本东北大学 (Tohoku University) 留学, 获得地球工学博士学位。2006年6月入职于中国石油大学(北京), 2008年6月晋升副教授, 2015年6月晋升教授。2008年9月至2009 年5月在斯坦福大学地球物理系及科罗拉多矿业学院地球物理系访问 交流。2017年6月至2017年9月在加拿大埃尔伯塔大学地球物理系 做访问教授。

研究方向为勘查地球物理,兴趣领域包括:①复杂介质中地震波与 电磁波传播理论;②跨频段地震岩石物理理论、实验及仪器开发; ③基于数字岩心的计算岩石物理; ④全极化井孔雷达与全极化探地 雷达。近年来,主持国家自然科学基金项目5项(含联合基金重点项 目1项,面上项目3项,青年基金1项),国家重大专项子课题1项, "教育部博士点新教师基金" 1项 , "留学回国基金" 1项 , 以项目 骨干参加 973 与 863 课题各1项, 2008年入选"北京市科技新星 计划", 2010年入选"北京市优秀人才资助计划", 2015年获得 "刘光鼎地球物理青年科学技术奖"。获授权专利20余项;在国内 外重要学术期刊与国际会议上共发表论文90余篇,其中SCI文章40 余篇,含地球物理领域顶级期刊10余篇。代表性成果以第一作者或 通讯作者发表在国际期刊 Geophysical Research Letters, Journal of Geophysical Research, Geophysical Journal International, IEEE Transaction on Geoscience and Remote Sensing, IEEE Geoscience and Remote Sensing Letters, IEEE Antennas and Wireless Propagation Letters, 以及Geophysical Prospecting, 兼任上述期刊的审稿专家。任《Petroleum Science》期刊编委, 2018年被GJI期刊评为"杰出审稿人", 2021年被《中国科学》期 刊评为"优秀审稿人"。

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# MEETING SCHEDULE 会议日程

	6月3日,星期一	塔里木油田公司研发中心
08:00 - 19:30	会议报到、现场注册	
10:30 - 13:30 16:30 - 19:30	会前课程:复杂地表条件下的浅-中-深地震成像	
13:30 - 15:30	午餐	
18:00 - 19:00	分会场主席会议	
19:30 - 21:00	晚餐	

	6月4日,星期二		
09:00 - 13:30	开幕式与全体报告单元 单元主席: 待定 塔里木油田公司研发中心学术报告厅		
09:00 - 09:15	开幕致辞		
09:15 - 09:40	特邀报告1:深层地质目标导向地震采集 报告嘉宾:符 <b>力</b> 耘,中国石油大学(华东)		
09:40 - 10:05	特邀报告2:使用训练词典的三维多次波压制 报告嘉宾: <b>于舟</b> ,汇泉地球物理服务公司		
10:05 - 10:30	特邀报告3:塔里木复杂地表条件下的地震成像 报告嘉宾:朱宪怀,富兰国际勘探技术(北京)有限公司(FGS)		
10:30 - 10:55	特邀报告4:深层超深层油气勘探地震波成像处理针对性方法技术 报告嘉宾: <b>王华忠</b> ,同济大学		
10:55 - 11:20	特邀报告5:深层地球物理成像和目标刻画技术的探索 报告嘉宾:黄旭日,西南石油大学		
11:20 - 11:50	研讨会合影、茶歇		
11:50 - 12:15	特邀报告6:塔里木盆地超深碳酸盐岩储层刻画技术挑战、研究进展与展望 报告嘉宾: <b>耿建华</b> ,同济大学		
12:15 - 12:40	特邀报告7: 地震预测渗透率技术 报告嘉宾: <b>王尚旭</b> ,中国石油大学(北京)		
12:40 - 13:05	特邀报告8:超深层高温高压岩石物理实验技术及应用 报告嘉宾: <b>刘卫华</b> ,中石化南京物探院地球物理实验中心		
13:05 - 13:30	特邀报告9: 灰岩与白云岩的声电频散实验研究与储层预测中的应用 报告嘉宾: 赵建国,中国石油大学(北京)		

13:30 - 15:30	午餐		
16:10 - 17:50	单元1:超深层地震探测理论 与方法 单元主席:待定 地点:学术报告厅	单元2:超深层陆上地震采集 技术(含近地表) 单元主席:待定 地点:2A会议室	单元3:超深层保真去噪与弱信号恢复技术 单元主席:待定 地点:2C会议室
16:10 - 16:30	塔西南山前三维地震正演模拟 及深层成像影响因素分析 王春明,中国石油大学(北京),中国石油勘探开石油勘探开石油为究院;陈小宏,中国石油为探开石油内究院;陈小宏,中国国界大治,于京于发研究院;发研究院,关于发研究所,以下发明,中国新,中国新,中国为公司;集成中国,由于以公司;集成中国,由于以公司;集成中国,由于以公司;集成中国,由于以及时,是有关的。	塔里木油田地震信号高频缺失现象研究 裴广平,邓建峰,陈飞旭, 王国纬,王兴军. 中国石油塔里木油田分公司勘探开发研究院	基于双聚焦方法的散射噪声 抑制 沈天晶,胡叶正,黄旭日, 陈小春 西南石油大学
16:30 - 16:50	从零偏移垂向地震剖面看反射 层层析成像在盐下裂缝性油藏 结构定向成图中的应用 宗晶晶*,鲁才*,胡光岷*,窝 聿楷**;*电子科技大学,**西 南石油大学	塔里木盆地山地地震勘探节点 采集技术探索与应用 罗文*,张晓斌,袁光银,敬龙江,苏佳曦,袁兵,耿春 中石油东方物探公司西南物探 分公司	俞氏子波滤波和超虚折射相干技术在库车山地三维地震资料处理中的应用徐仲博 <sup>1</sup> ,刘连升 <sup>2</sup> ,郑多明 <sup>1</sup> ,段文胜 <sup>1</sup> ,李健 <sup>2</sup> ,党青宁 <sup>1</sup> 1中国石油塔里木油田分公司2北京帕美智软件开发有限公司
16:50 - 17:10	走滑断裂物理模拟及地震响应特征分析 司文朋*,邢廷栋,薛诗桂,马灵伟.中石化石油物探技术研究院有限公司	塔里木盆地沙漠区超深断控缝洞型油气藏可控震源地震勘探关键技术杨威1,2*,陈学华1,倪良健2,杨子川21油气藏地质及开发工程全国重点实验室,成都理工大学2中国石油化工股份有限公司西北油田分公司	用于速度建模的超长排列试验 赵锐锐*,彭更新,李大军,中 石油塔里木油田公司 朱宪怀,Kun Xu, Yan Illiescu ,富兰国际勘探技术(北京)有 限公司(FGS)
17:10 - 17:30	塔里木地区粘弹性介质正演模 拟研究 胡叶正 <sup>1</sup> ,沈天晶 <sup>1</sup> ,窝聿楷 <sup>1</sup> , 裴广平 <sup>2</sup> ,黄旭日 <sup>1</sup> 1.西南石油大学 2.中石油塔里木油田分公司	联合表层建模技术在塔西南巨厚黄土区的研究与应用吕景峰1,张晓华1,陈飞旭2,邸江伟1,陈敬国13,崔永福21.中国石油集团东方地球物理公司,库尔勒,841000	逆散射级数法层间多次波预测研究及应用 向平奥*1,2, 赵锐锐1,2, 李勇军1,2, 张春博1,2, 王国纬1,4 1.中国石油天然气股份有限公司塔里木油田公司勘探开发研究院



		2 塔里木油田公司,库尔勒, 841000 3.中国石油大学(北京)	2 中国石油天然气集团有限公司超深层复杂油气藏勘探开发技术研发中心
17:30 - 17:50	高精度起伏地表地震波场模拟 及成像验证:三维案例 李翔*,胡自多,田彦灿, 刘威,韩令贺,中国石油勘探 开发研究院西北分院油藏描述 重点实验室,甘肃兰州; 姚刚,中国石油大学(北京) 非常规油气科学技术研究院, 北京	两宽一高采集技术在吉林探区 超深油气勘探中的应用 罗春波,蔡培蓥,余圣华,黄 翠叶,赵富城,陈国君。 中国石油东方地球物理勘探有 限责任公司	基于信号包络优化叠加的绕射 波分离方法 慕文韬*、张巍毅、张建磊、田 振平. 中石油东方地球物理勘探有限 责任公司物探技术研究中心
17:50 - 18:10	张贴报告单元A:超深层非均局 单元主席:待定	<b>质储层预测与烃类检测技术</b>	
17:50 - 17:55	碳酸盐岩物理分析在叠前储层 预测中的应用 马永强, Lanmei Ke, Liuxin Yang, Long Yin, Zhao Ding. Sinopec Geophysical Research Institude	西昆仑山前带柯东地区超深层 碳酸盐岩储层预测方法及应用效果 费澎 <sup>1*</sup> ,李强 <sup>1</sup> ,陈湘飞 <sup>1</sup> ,刘军 <sup>1</sup> ,白雪 <sup>1</sup> ,王玥铭 <sup>1</sup> ,杜海 <sup>2</sup> 1.中石油东方地球物理勘探有限责任公司塔里木物探研究院 2.中石油塔里木油田公司塔西南勘探开发公司	
17:55 - 18:00	基于最优属性加权学习方法的 走滑断裂参数提取 马永强, Ruyi Zhang, Shangfeng Yang, Liuxin Yang. SINOPEC Geophysical Research Institute Co., Ltd.	相对地质年代导向的沿层振幅 变化率属性:以顺北地区深层 走滑断控碳酸盐岩储集体地震 反射识别为例 郭康康,李映涛,邓尚,张继 标,王铁一,刘大卫,中国石 化石油勘探开发研究院	
18:00 - 18:05	Chirplet-W变换时频分析技术在塔里木盆地顺北8井区碳酸盐岩断控缝洞储集体预测中的应用高利君 <sup>1,2</sup> ,李海英 <sup>2</sup> ,龚伟 <sup>2</sup> ,符力耘 <sup>1</sup> 1.中国石油大学(华东)地球科学与技术学院2.中石化西北油田分公司勘探开发研究院	叠前各向异性裂缝检测技术在 川中灯影组超深层储层预测中的应用 闫媛媛 <sup>12*</sup> ,冉崎¹,陈康¹,杨广广¹,戴隽成¹,郗诚¹,吕龑¹,魏玮¹; 1.中国石油西南油气田公司勘探开发研究院 2.成都理工大学沉积地质学院	

18:10 - 19:30	单元4:超深层地震探测理论 与方法 单元主席:待定 地点:学术报告厅	单元5:超深层陆上地震采集 技术(含近地表) 单元主席:待定 地点:2A会议室	单元6:超深层保真去噪与弱信号恢复技术 单元主席:待定 地点:2C会议室
18:10 - 18:30	三维全方位局部角度域波场分离与成像技术 何虹 <sup>1,2</sup> ,杨雪飞 <sup>1</sup> ,王博 <sup>2</sup> 1 西南石油大学地球科学与技术学院,成都 610500 2 中国石油川庆钻探工程有限公司,成都 610051	高效可控震源采集技术在塔里木超深层地震勘探中的应用探索 袁光银,中国石油东方地球物理勘探有限责任公司西南物探分公司;李红远,中国石油东方地球物理勘探有限责任公司两个地球物理勘探有限责任公司西南物探分公司;李剑威,中国石油东方地球物理勘探有限责任公司西南物探分公司;黄有晖,中国石油塔里木油田分公司勘探事业部。	陆地超深层层间多次波压制方法研究 谢俊法,刘文卿,王靖,王艳香,金保中中国石油勘探开发研究院西北分院,甘肃兰州
18:30 - 18:50	陆地勘探激光超声地震物理模 拟技术 薛诗桂,邢廷栋,王辉明,司 文朋,焦艳艳,中石化石油物 探技术研究院有限公司	北疆超深层石炭系内幕成像地震采集技术 夏建军,张录录,郭再平,彭晓,中国石油集团东方地球物理勘探有限责任公司	针对塔北地区深奥陶碳酸盐岩油藏高保真度处理策略段文胜1,李蓉2,赵锐锐1,龚紫婧2,杨珊珊1,刘华锋2,崔杰21中国石油天然气股份有限公司塔里木油田公司2斯伦贝谢
18:50 - 19:10	基于超深断控储集体模型的 地震模拟与响应特性研究 韩德超*,索重辉,杨丽, 刘卫华,马灵伟,李弘艳, 袁媛,宋林,张春丽 中石化石油物探技术研究院有 限公司,南京,211103 中国石化地球物理重点实验室 ,南京,211103	微测井/微VSP近地表吸收衰 减调查数据预处理探讨 彭更新 <sup>1</sup> ,金德刚* <sup>2</sup> ,邹强 <sup>1</sup> , 赵锐锐 <sup>1</sup> ,李大军 <sup>1</sup> ,李忠 <sup>2</sup> 1 塔里木油田公司 2 东方地球物理公司	基于多分辨率深度学习的塔里木地面炮集去噪技术研究董新桐*1²,林君¹²,程明²,王洪洲²,董士琦³,罗玉钦⁴1南方海洋科学与工程广东省实验室(湛江)2吉林大学仪器科学与电气工程学院3东北电力大学现代电力系统仿真控制与绿色电能新技术教育部重点实验室,东北电力大学4东北电力大学理学院



19:10 - 19:30	走滑断裂核带结构地震物理模拟实验 邢廷栋,薛诗桂,刘卫华,马灵伟,司文朋,焦艳艳,王辉明,闾晨中石化石油物探技术研究院有限公司	低频可控震源在超深缝洞型油气藏勘探中的应用 王彦峰1,黄有晖2,陈学强1,裴广平2,段孟川1,徐凯驰2,张岩1 1中石油东方物探公司,库尔勒,新疆 2中石油塔里木油田公司	基于改进BM3D的叠后弱信号恢复 焦凯,张宓 中国石油大学(北京)克拉玛 依校区
19:30 - 20:30	晚餐		

6月5日,星期三			
09:30 - 11:10	单元7:超深层井中地震与重磁电技术 单元主席:待定地点:2C会议室	单元8:超深层非均质储层 预测与烃类检测技术 单元主席:待定 地点:2A会议室	单元9:超深层速度建模与偏移成像技术 单元主席:待定地点:2C会议室
09:30 - 09:50	高精度重磁在库北康村走滑断裂研究中的应用 赵文举 <sup>1*</sup> ,汪洋 <sup>2</sup> ,徐凯驰 <sup>2</sup> ,李建立 <sup>2</sup> ,张鹏越 <sup>1</sup> 1中国石油东方地球物理公司 2中国石油塔里木油田分公司	地震沉积学研究塔里木盆地 寒武系碳酸盐岩台地至盆地 沉积相和储层: Florida Keys 的启示 徐兆辉 <sup>1*</sup> , 曾洪流 <sup>2</sup> , 胡素云 <sup>1</sup> , 张君龙 <sup>3</sup> , 刘伟 <sup>1</sup> , 周红英 <sup>1</sup> , 马德波 <sup>1</sup> , 傅启龙 <sup>2</sup> 1 中国石油勘探开发研究院, 北京 100083; 2 美国德克萨斯大学奥斯汀分校经济地质局, Austin; 3 中国石油大庆油田研究院, 大庆	TTI介质各向异性初至波层析 反演及其在西秋三维的应用 杨海军 <sup>1</sup> ,刘连升 <sup>2</sup> ,李健 <sup>2</sup> ,秦龙 <sup>1</sup> ,李文燕 <sup>1</sup> ,李勇军 <sup>1</sup> 1中国石油塔里木油田分公司 2北京帕美智软件开发有限公司
09:50 - 10:10	应用大地电磁测深方法研究 塔里木超深层基底结构 魏巍¹,胡祖志²,张振¹, 张弘强²,许士朝² 1中国石油天然气股份公司塔 里木油田分公司,新疆库尔勒 2中国石油东方地球物理公司,河北涿州	基于人工智能技术的超深碳酸 盐岩岩溶储层三维地震预测— —以塔里木盆地塔中地区为例 吴江勇¹,王改革²*,程钊¹, 佟彦明²,周杰¹,吴川², 李盛谦¹,杨品² 1中国石油塔里木油田勘探开 发研究院 2斯伦贝谢科技服务(北京) 有限公司	倾斜横向各向同性介质的高效纯qp波逆时偏移 黄建平*,毛强,张子枭 中国石油大学(华东)地球科学系

10:10 - 10:30	时频电磁技术在超深层油气 勘探中的应用 孙卫斌*1,李大军2,徐凯驰2,李建立2,许士朝1 1.中国石油集团东方地球物理 勘探有限责任公司 2.塔里木油田公司资源勘查部	塔里木地区超深层非均质储层叠前预测范伟佳*,李俊,刘春雨,杨建礼,北京珠玛阳光科技有限公司	基于DWT和井控层析联合建模在深层低幅度地区的成像研究李立胜*,叶月明,张颖,王兆旗,陈见伟中国石油杭州地质研究院
10:30 - 10:50	三维重磁电在库车复杂山前 带勘探中的应用 胡祖志,东方地球物理公司, 李大军,李建立,塔里木油田 公司 张鹏越,刘娟,孟翠贤,石艳 玲,东方地球物理公司	<b>缝洞型储层地震响应分析以 塔里木盆地缝洞型储层典型 模型为例</b> 杨圣*,黄旭日,肖文,李凯,胡叶正 1 西南石油大学地球科学与技术学院 2 中石油塔里木油田分公司 3 中石化物探技术研究院有限公司	基于井标定和数字地质露头的构造建模技术 张伟,胡瑞卿,裴家定,刘晓光 中石油东方地球物理公司
10:50 - 11:10		基于贝叶斯GASA算法的地震 反演新方法 刘衡,胡瑞卿,李卿,高凯, 于璐 中石油东方地球物理公司	基于特征波的宏观速度模型 立体层析反演方法及应用 孙小东,李傲伟,李振春, 赵亮 中国石油大学(华东)
11:10 - 11:40	张贴报告单元B:超深层地震势 去噪与弱信号恢复技术 单元主席:待定	<b>深测理论与方法,超深层保真</b>	茶歇 地点:会场外廊区
11:10 - 11:15	超深井压裂微震地面监测的 字验 吴刚¹,蔡江²,赵业卫³*,刘 美娟¹,王丹³,梁北援⁴ 1中石油华北油田,任丘, 065700 2中石油渤海钻探油气井测试 分公司,廊坊,065007 3盘锦辽油晨宇集团,盘锦, 124011 4 GeoImage LLC, CA 94118, USA	超深层成像宽频解决方案: 理论及在全球的经验 吕淑英,Philippe Hermann ,Nicolas Tellier and Shuki Ronen* Sercel	

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11:15 - 11:20	变频四维地震技术 杨学锋 <sup>1</sup> ,赵圣贤 <sup>1</sup> ,刘绍军 <sup>1</sup> ,李子顺 <sup>2,3</sup> ,李果 <sup>2</sup> ,雷越 <sup>1</sup> 1中国石油西南油气田分公司 页岩气勘探开发研究院; 2纳斯维石油科技(成都)有 限公司; 3中国石油大庆油田勘探开发研究院)	"三Q"高分辨率处理技术的研究与应用 杨珊珊*1², 赵锐锐1², 姜洋1², 李勇军1², 孙海军1² 1中国石油天然气股份有限公司塔里木油田公司勘探开发研究院 2中国石油天然气集团有限公司超深层复杂油气藏勘探开发技术研发中心	
11:20 - 11:25	迪北地区径向域5D数据重建 党青宁,段文胜,左安鑫, 秦龙,周昌 中石油塔里木油田公司	基于零井源距VSP的地震多次波识别与压制技术在超深油气勘探中的应用 王腾宇*123,陈豪*,闫婷 <sup>1,2</sup> ,张振¹,汪洋¹,黄录忠¹ 1中国石油塔里木油田勘探开发研究院 2新疆超深油气重点实验室 3中国石油天然气集团有限公司超深层复杂油气藏勘探开发技术研发中心 4成都爱为倍思科技有限公司	
11:25 - 11:30	塔里木顺中沙漠区可控震源 采集高保真去噪技术 莫延钢 <sup>1</sup> ,张媛 <sup>1</sup> ,刘来祥 <sup>1</sup> , 刘志远1 1中石化石油勘探开发研究院	基于LR神经网络的地震记录 提频方法 李洪,曹俊兴,成都理工大学 地球物理学院,成都 610059	
11:30 - 11:40	补充讨论与问答		
11:40 - 13:20	单元10:超深层陆上地震采集技术(含近地表),超深层保真去噪与弱信号恢复技术单元主席:待定地点:学术报告厅	单元11:超深层非均质储层 预测与烃类检测技术 单元主席:待定 地点:2A会议室	单元12:超深层速度建模与 偏移成像技术 单元主席:待定 地点:2C会议室
11:40 - 12:00	塔里木盆地库车凹陷复杂山地地震采集关键技术及应用何伟*,胡善政,敬龙江,耿春,肖玮,杜均国,刘军,胡淇中石油东方物探公司西南物探分公司	用损伤力学计算碳酸盐岩储 层天然裂缝及其在顺北区块 的应用实例 沈新普,中国石油大学(北京)	基于层析反演的微测井和小 折射资料综合解释方法 梁巧丽 <sup>1</sup> ,雷刚林 <sup>2</sup> ,刘连升 <sup>1</sup> , 赖敬容 <sup>2</sup> ,周昌 <sup>2</sup> ,姜洋 <sup>2</sup> 1 北京帕美智软件开发有限公司 2 中国石油塔里木油田分公司

12:00 - 12:20	深部目标探测采集技术相关因素分析 许荣伟*,王华忠,冯波, 吴成梁 同济大学海洋与地球科学学院 ,波现象与智能反演成像研究 组,上海,200092	自适应W变换凸显超深地震低频分量 张力予,蔡涵鹏,张志伟, 马菀荻. 电子科技大学资源与 环境学院 苏明军,袁成. 中国石油天然 气股份有限公司勘探开发研 究院西北分院	准噶尔盆地南缘双复杂区超深层"真"地表叠前深度偏移技术研究与应用陈见伟 <sup>1</sup> ,孟贺 <sup>1</sup> ,陈希光 <sup>1</sup> ,姚茂敏 <sup>2</sup> ,宋志华 <sup>2</sup> . 1 中国石油杭州地质研究院,浙江杭州 310023 2 中国石油新疆油田公司,新疆克拉玛依市 834000
12:20 - 12:40	压缩感知在地震数据处理中的 应用:以塔里木区块数据为例 王德英 <sup>1,2</sup> ,苏勤 <sup>1,3</sup> ,曾华会 <sup>1</sup> ,张凯 <sup>2</sup> ,寇龙江 <sup>1</sup> ,金保中 <sup>1</sup> 1中石油勘探开发研究院西北 分院 2中国石油大学(华东) 3电子科技大学	多属性约束的叠前宽方位裂缝预测技术在英买2地区的应用 曾勇坚,宗兆云,深层油气全国重点实验室(中国石油大学(华东)),青岛,中国杜天玮,昆仑数智科技有限责任公司,北京,中国高宏亮,刘宇,杨美纯,中国石油塔里木油田分公司勘探开发研究院,新疆,中国号楠,中国石油塔里木油田分公司轮南来油气管理区,新疆,中国	"真"地表逆时偏移在川西地区的应用杨涛*,唐大海,王旭丽,冉丽君,胡欣,孙志昀,刘柏,谢格云中国石油西南油气田公司川西北气矿,四川江油
12:40 - 13:00	地震数据中的异常噪声消除 李小斌*,漆乔木,成都理工 大学地球物理学院; 王腾宇,中石油塔里木油田 分公司勘探开发研究院; 张洞君,中石油西南油气田 公司页岩气研究院;	塔里木盆地古城气田宽频带高分辨率地震识别礁滩透镜体储层。李子顺 <sup>1,3</sup> ,王玉华 <sup>2</sup> ,李强 <sup>3</sup> ,李振春 <sup>4</sup> ,孙山 <sup>3</sup> ,徐争伟 <sup>5</sup> ,李果 <sup>1</sup> 1纳斯维石油科技(成都)有限公司 2中国石油油气和新能源公司3大庆油田勘探开发研究院4中国石油大学(华东)5成都理工大学	叠前深度偏移新技术在塔里 木克深地区的应用 郄树海 <sup>1</sup> , 王德英 <sup>1,2</sup> , 雍运动 <sup>1</sup> , 刘文卿 <sup>1</sup> , 赵玉合 <sup>1</sup> 1 中国石油勘探开发研究院 西北分院 2 中国石油大学(华东)



13:00 - 13:20	基于功率谱质心频移反演算法的超深岩石Q因子估计张关磊,蔡涵鹏,陈挺,黄建强.电子科技大学资源与环境学院; 王腾宇,张振.中国石油塔里木油田勘探开发研究院		复杂山地初至波和反射波联合反演速度建模技术及应用陈阳阳*1,2, 彭更新1,2, 刘正文1,2, 赵锐锐1,2, 吴宇兵1,2, 赵英杰1,2 1 中国石油塔里木油田公司勘探开发研究院; 2 中国石油超深复杂油气藏勘探开发技术研发中心
13:30 - 15:30	午餐		
16:10 - 17:30	单元13:超深层保真去噪与 弱信号恢复技术,超深层速 度建模与偏移成像技术 单元主席:待定 地点:学术报告厅	单元14:超深层非均质储层 预测与烃类检测技术 单元主席:待定 地点:2A会议室	单元15:超深层速度建模与 偏移成像技术 单元主席:待定 地点:2C会议室
16:10 - 16:30	超深层地震成像中最小平方 基准面延拓驱动的反射波形 反演 程玖兵*,王腾飞,武泗海, 朱峰,耿建华 同济大学海洋与地球科学学 院	人工智能与地质建模技术相结合的塔里木盆地超深层碳酸盐岩缝洞系统全三维雕刻程划1, 佟彦明2*, 吴江勇1, 吴川2, 李盛谦1, 王改革2, 周杰1, 谭尘青2 1中国石油塔里木油田勘探开发研究院 2斯伦贝谢科技服务(北京)有限公司	TTI介质各向异性初至波层析 反演三步法解耦方案 李健 <sup>1</sup> ,彭更新 <sup>2</sup> ,刘连升 <sup>1</sup> , 王兴军 <sup>2</sup> ,张耀堂 <sup>2</sup> ,卢敬雅 <sup>2</sup> 1北京帕美智软件开发有限公司 2中国石油塔里木油田分公司
16:30 - 16:50	基于三维连续小波变换的叠前随机和相干噪声同时衰减 王晓凯*,刘达伟,陈文超,西安交通大学杨晓海,毛海波,中国石油新疆油田公司,中国乌鲁木齐	基于结构张量的裂缝性油气 藏三维雕刻主动等值线方法 李偲瑶*,黄旭日,唐书航 西南石油大学地球科学与技术学院	用于地震波速度建模的多感 受野蒸馏网络 路静,吴春雷*,李冉, 张欢,赵文琪 青岛软件学院、计算机科学与 技术学院,中国石油大学(华东)
16:50 - 17:10	叠瓦状初至静校正及近地表建模方法 孔凡勇,夏建军,宗思蒙,王 利业,于金林中石油东方地球物理公司	库车坳陷阳霞凹陷构造特征 丁维 <sup>1</sup> ,李继白 <sup>2*</sup> ,周雄波 <sup>2</sup> , 李志芳 <sup>2</sup> ,杨庆道 <sup>2</sup> ,李灏 <sup>2</sup> , 罗章清 <sup>2</sup> ,刘传山 <sup>2</sup> ,胡建辉 <sup>2</sup> , 谭代英 <sup>2</sup> ,陈明春 <sup>2</sup>	关于复杂构造偏移速度的模型研究 张山,南京捷诺科技有限公司

		1 中石化西北油田公司,乌鲁 木齐,新疆 2 中石化地球物理公司西南分 公司,成都,四川	
17:10 - 17:30	基于垂直地震剖面资料的岩溶储层特征局部全波形反演李凯 <sup>1,2</sup> ,王立歆 <sup>1</sup> ,黄旭日 <sup>2</sup> ,孙振涛 <sup>1</sup> ,周单 <sup>1</sup> ,陈小春 <sup>2</sup> . 1中石化石油物探技术研究院2西南石油大学地球科学与技术学院	超深复杂低孔低渗砂岩储层裂缝预测 简世凯*1,2,3,4,彭更新1,2,3,符力耘4,唐永亮1,2,3, 段文胜1,2,3,成锁1,2,3, 郑多明1,2,3,田浩男1,2,3, 赵光亮1,2,3,王鑫1,2,3 1中石油塔里木油田公司 2中国石油天然气集团有限公司超深层复杂油气藏勘探开发技术研发中心 3超深复杂油气藏工程研发中心4中国石油大学(华东)深层油气全国重点实验室	<b>辽河坳陷东部凹陷多期火山岩和复杂构造成像及储层揭示</b> 李波涛 <sup>1</sup> ,邓佩佩 <sup>1</sup> ,颜玮 <sup>1</sup> ,邹启伟 <sup>2</sup> ,张东伟 <sup>2</sup> ,柏桐 <sup>2</sup> ,刘康 <sup>2</sup> 1 CGG 2 CNPC
17:30-17:50	<b>张贴报告单元C:超深层速度建模与偏移成像技术</b> 单元主席:待定		<b>茶歇</b> 地点:会场外廊区
17:30 - 17:35	有限差分求解q补偿逆时偏移 成像方法 黄建平*,慕鑫茹,中国石油 大学(华东),青岛	联合速度建模方法与应用研究 闫帅,中石化石油工程地球物 理有限公司科技研发中心	
17:35 - 17:40	深层复杂构造的多聚焦成像 技术 张丽艳,李昂*,殷文, 张镇生,杜守颖,任亚鹏 中国石油大学(北京)克拉玛 依校区	基于LS-SFD方法的VSP数据RTM技术 胡瑞卿,高凯,李卿,张一鸣,李隆梅 中石油东方地球物理公司	
17:40 - 17:45	面向目标的数据域最小二乘 逆时偏移 陈凯*,胡叶正,黄旭日,西 南石油大学	塔里木盆地麦盖提斜坡沙丘地 表区保幅保真和高分辨率地震 资料处理关键技术及应用效果 崔雷,陈湘飞*,赵博,周成刚 ,刘军,陈璐,王春阳,刘军	
17:50 - 19:10	单元16:超深层非均质储层预测与烃类检测技术,超深层保真去噪与弱信号恢复技术单元主席:待定地点:学术报告厅	单元17:超深层保真去噪与 弱信号恢复技术,超深层速 度建模与偏移成像技术 单元主席:待定 地点:2A会议室	单元18:超深层速度建模与 偏移成像技术 单元主席:待定 地点:2C会议室

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17:50 - 18:10	应用地层结构约束叠前地震梯度纹理模式识别超深层缝洞体张志伟,蔡涵鹏,张力予,王 岭钧.电子科技大学资源与环境学院陈康,彭达.中石油西南油气田分公司勘探开发研究院	5D匹配追踪傅立叶插值技术 在复杂山区三维地震数据处 理中的应用 何俊杰,胡瑞卿,张晓莉, 高能学,张思宁 中石油东方地球物理公司	塔西南双复杂区深度域速度 建模研究 王靖*,孙甲庆,郄树海, 谢俊法 中国石油勘探开发研究院西北 分院
18:10 - 18:30	OBN技术在超深层盐下碳酸盐岩储层预测方面的应用白淳元 <sup>1</sup> ,徐云贵 <sup>1</sup> ,王思文 <sup>2</sup> ,王红平 <sup>1</sup> 1 西南石油大学地球科学与技术学院 2 中石油杭州地质研究院	高分辨率叠层成像在塔里木盆地超深勘探中的应用 吴成梁*1², 王华忠¹², 冯波¹², 许荣伟², 盛燊², 韩龙祥² 1同济大学海洋与地球科学学院海洋地质学国家重点实验室, 上海, 200092 2波现象与智能反演成像组,同济大学海洋与地球科学学院, 上海, 200092	塔里木超深层断控储集体高精度速度建模技术 张媛¹,莫延钢¹,魏哲枫¹, 姜大建¹,刘志远¹ 1中石化石油勘探开发研究院,北京100020
18:30 - 18:50	基于自定义高分辨率小波的可控震源扫频信号设计方法 聂振波*,王华忠,盛燊 同济大学海洋与地球科学学院 波现象与智能反演成像组,上海,200092	基于神经网络算法的近地表 Q值预测方法 赵超峰,张伟,赵建宇,田 建涛,陈艳君 中石油东方地球物理公司, 涿州,河北,072751,中国	不同初至层析成像在厚起伏低速层中的应用陈璐,张一鸣,胡瑞卿,顾小弟,张晓莉,高能学1中国石油天然气集团公司
18:50 - 19:10	相控井震联合的贝叶斯地质建模方法在塔里木盆地岩溶油气藏的应用姜泽磊*1,黄旭日1,李凯12,肖文3,胡业正11西南石油大学地球科学与技术学院,四川成都6105002中石化石油物探技术研究院有限公司,江苏南京210003中国石油塔里木油田分公司勘探开发研究院,库尔勒,841000		库车地区叠前深度偏移的速度融合处理与圈闭实现段文胜,王兴军,赖敬容,周昌,陈超中石油塔里木油田公司
19:10 - 19:30	<b>总结、颁奖与闭幕</b> 主持人:待定		地点: 学术报告厅
19:30 - 20:30	晚餐		



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Society of Exploration Geophysicists (SEG)

中国石油天然气集团有限公司超深复杂油气藏勘探开发技术研发中心 R&D Center for Ultra Deep Complex Reservoir Exploration and Development, CNPC

中国石油天然气股份有限公司塔里木油田分公司

PetroChina Tarim Oilfield Company



中石油东方地球物理勘探有限责任公司

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中国石油勘探开发研究院

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