



## CALL FOR ABSTRACTS

# 2026 SEG 6<sup>th</sup> International Workshop on Mathematical Geophysics

17–19 September 2026 | Beijing · China

## WORKSHOP DESCRIPTION

The SEG 6th International Workshops on Mathematical Geophysics (IWMG) will take place on 17–19 September 2026 in Beijing. Centered on the theme of foundation models for mathematical geophysics, this workshop focuses on advancing geophysical data processing, inversion, and interpretation through next-generation artificial intelligence.

As geophysical problems grow in scale and complexity—characterized by strong nonlinearity, incomplete observations, and uncertainty—emerging AI technologies such as foundation models, diffusion models, and generative learning offer new capabilities for extracting subsurface information from seismic and multi-physics data.

This workshop aims to explore how these modern AI tools can address core challenges in geophysics. By integrating large-scale learned representations with physical modeling and mathematical constraints, foundation models have the potential to provide more robust, transferable, and computationally efficient solutions than traditional workflows. Particular attention will be given to hybrid approaches that combine physics-based inversion with generative priors, neural operators, and probabilistic modeling frameworks.

The goal of this workshop is to foster interdisciplinary exchange and accelerate the adoption of advanced AI methodologies within the geophysical community. We invite students, researchers, and industry practitioners to share recent advances, discuss open challenges, and develop new perspectives on how foundation models and generative AI can reshape the future of geophysical exploration and subsurface characterization.

## ABSTRACT SUBJECTS

We invite abstracts for the following subjects.

- Foundation model
- Mathematics of AI
- Machine learning
- Data acquisition and processing
- Modeling, migration and inversion
- Seismic interpretation
- Seismology and AI
- Solid Earth and AI
- Planetary and AI
- Mathematical geophysics interdisciplinary



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## GENERAL CO-CHAIRS

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Yibo Wang, Institute of Geology and Geophysics, CAS  
Haijiang Zhang, University of Science and Technology of China  
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Tariq Alkhalifah, KAUST

*(Listed in alphabetical order by first name)*

## ABSTRACT FORMAT

1 page, single-column format.

- ♦ Abstracts should include sufficient details for the committee to judge the quality of the work submitted.
- ♦ Abstract should be a single page, including text and figures (figures are optional).
- ♦ Abstracts should be on 8.5 x 11 inch paper size, text in Roman font, stay 1 inch clear of the page margins and submitted in PDF format.
- ♦ Title should be one or two lines, at the top of the page, in bold font, and size 12 point.
- ♦ Authors should be listed in Roman italic font, size 10 point, and located just below the title.

If authors plan to publish abstracts in SEG Library after the workshop, the submissions must follow the SEG Abstract Template and the copyright transfer letter should be confirmed after the workshop.

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Are you a student?  Yes  No

Subject \_\_\_\_\_ Presentation Type:  Oral  Poster  Both

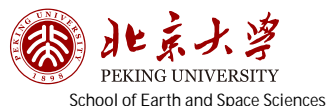
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Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Please email abstract and call for abstracts form by **15 June 2026** to [china@seg.org](mailto:china@seg.org)

Or, submit abstract online via SEG China website <https://seg-china.org.cn/events/calendar-106.html>

## ORGANIZER



## IMPORTANT DATE

Call for Abstracts opens: 15 April 2026

Call for Abstracts closes: 15 June 2026

Early Bird Registration opens: 20 July 2026

Full rate registration starts: 17 August 2026



[SEG.ORG/EVENTS](https://www.seg-china.org.cn/events/calendar-106.html)

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# 征稿通知

# 2026 SEG 第六届国际数学地球物理研讨会

2026年9月17-19日 | 中国·北京

## 主办单位



## 会议背景

第六届国际数学地球物理研讨会将于2026年9月17-19日在北京举行。本届会议以“**数学地球物理的基础模型**”为主题，聚焦通过新一代人工智能技术推动地球物理数据处理、反演与解释的发展。

随着地球物理问题规模与复杂度不断提升，呈现出强非线性、观测不完整及不确定性等特征，以基础模型、扩散模型、生成式学习为代表的新兴人工智能技术，为从地震及多物理场数据中提取地下信息提供了全新能力。

本次研讨会致力于深入探讨这些前沿人工智能工具如何有效应对地球物理学的核心挑战。通过将大规模数据驱动学习与物理建模及数学约束有机结合，基础模型有望突破传统工作流的局限，提供更稳健、迁移性更强且计算效率更高的解决方案。会议将特别关注结合物理反演与生成先验、神经算子及概率建模框架的混合方法研究。

研讨会旨在促进跨学科交流，推动先进人工智能方法在地球物理领域的落地应用。我们诚邀学生、科研人员及行业从业者分享最新进展、探讨开放难题，共同展望基础模型与生成式人工智能如何重塑地球物理勘探与地下表征的未来。

## 征稿专题

- 基础模型
- 人工智能数学基础
- 机器学习
- 数据采集与处理
- 建模、偏移与反演
- 地震解释
- 地震学与人工智能
- 固体地球与人工智能
- 行星科学与人工智能
- 数学地球物理交叉学科



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征稿通知

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2026年9月17-19日 | 中国·北京

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成秋明

马坚伟

彭苏萍

Maurico Sacchi

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- 篇幅为一页, 单栏排版。
- 摘要应包含足够详细的内容, 以便技术/审稿委员会能够评判所提交研究成果的论文质量。
- 摘要文章篇幅为1页, 包含文字及 1 幅图表(可选)。
- 摘要应采用 8.5 × 11 英寸的纸张尺寸, 罗马字体, 距离页面边缘至少 1 英寸, 并且以 PDF 格式提交。
- 标题应为1-2行, 置于页面顶部, 采用粗体字, 字号为 12 磅。
- 作者姓名应使用罗马斜体字, 字号为 10 磅, 列于标题正下方。

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(二) 2026年6月15日前, 登录SEG中国网站在线投稿, 会议网址: <https://seg-china.org.cn/events/calendar-106.html>

## 重要日期:

征稿开始日期: 2026 年 4 月 15 日

征稿截止日期: 2026 年 6 月 15 日

早鸟注册开始: 2026 年 7 月 20 日

常规注册开始: 2026 年 8 月 17 日

