STEM2026 & SFEE-5 会议议程

STEM2026 & SFEE-5 Conference Programme

第九届 STEM 教育国际研讨会暨第五届卓越教育国际研讨会

The 9th International STEM in Education Conference & The 5th Shanghai Forum for Education Excellence

2026 年 11 月 5–8 日　5–8 November 2026

上海交通大学闵行校区学生中心丨上海市闵行区东川路 800 号

Student Center Building, Minhang Campus, Shanghai Jiao Tong University | 800 Dongchuan Road, Minhang District, Shanghai, China

更新日期：2026 年 11 月 2 日　Updated 2 November 2026

详细日程

Detailed Program

11 月 5 日 星期四

Thursday, 5 November

注册与会前活动

Registration and Pre-conference Activities

时间 Time	活动安排 Activity
14:00–17:00	会议报到	地点：陈瑞球楼教育学院一楼；白金汉爵酒店一楼 Conference check-in	Location: First floor, Chen Sui Kau Hall, School of Education; first floor, Shanghai Minhang Platinum HanJue Hotel
14:00–18:00	海报展示区及 WRO 邀请赛布展 Poster area and WRO setup
14:00–15:00	学创中心中文导览；文博楼校史馆英文导览（50 人预约，点击预约: https://wj.sjtu.edu.cn/q/GEAzpSJU） Chinese tour of the Student Innovation Center; English tour of the University History Museum, Wenbo Building	50 places; registration: https://wj.sjtu.edu.cn/q/GEAzpSJU
15:30–16:30	学创中心英文导览；文博楼校史馆中文导览（50 人预约，点击预约: https://wj.sjtu.edu.cn/q/GEAzpSJU） English tour of the Student Innovation Center; Chinese tour of the University History Museum, Wenbo Building	50 places; registration: https://wj.sjtu.edu.cn/q/GEAzpSJU
15:00–17:00	VEX 机器人工作坊（预约，点击预约: https://wj.sjtu.edu.cn/q/GEAzpSJU） VEX Robotics Workshop	Registration: https://wj.sjtu.edu.cn/q/GEAzpSJU

11 月 6 日 星期五

Friday, 6 November

开幕式与主旨报告

Opening Ceremony and Keynote Addresses

时间 Time	活动安排 Activity
08:00–09:00	会议报到	地点：学生中心一楼 Conference check-in	Location: First floor, Student Center Building
08:50–09:00	徐汇区青少年活动中心表演	学生中心 A100 Performance by Juveniles Activity Center of Xuhui District	Location: Student Center A100
09:00–09:30	开幕式及大合影	主持人：江丰光、周晓菲	学生中心 A100 Opening ceremony	Chairs: Feng-Kuang Chiang and Xiaofei Zhou	Student Center A100
09:30–10:20	主旨报告 I 凌文院士	学生中心 A100 中国工程院院士、上海交通大学电气工程院士工作站 题目：AI 时代的 STEM 教育 Keynote Address I — Academician LING Wen	Student Center A100 Academician of the Chinese Academy of Engineering, President of Shandong Association for Science & Technology Title: STEM Education in the AI Era
10:20–10:50	茶歇 Tea break
10:50–11:40	主旨报告 II Prof. Dann Mallet	学生中心 A100 昆士兰科技大学 题目：STEM 教育变革与国际发展援助的长远视角 Keynote Address II — Prof. Dann Mallet	Student Center A100 Queensland University of Technology Title: The long view of STEM education change and international development assistance
12:00–13:00	午餐 Lunch
13:00-17:00	海报展示及 WRO 展示 (交流时间：13：30-14：30)；徐汇区青少年活动中心汇报	地点：学生中心一楼 Poster and WRO showcase (Presentation time: 13:00-14:30); presentation by Juveniles Activity Center of Xuhui District	Location: First floor, Student Center Building
13:00–14:30	论文发表平行分会场 A1-A3；国际执委会会议（B205） Parallel paper presentation sessions A1–A3; International Executive Committee meeting (B205)
14:25–16:25	全国中小学工程教育联盟课题答辩与交流会（B409） National Primary and Secondary School Engineering Education Alliance project defense and exchange session (Room B409)
14:30–15:00	茶歇 Tea break

15:00–17:00	论文发表平行分会场 A4–A6（详见后附 A1-A6 论文分组） Parallel paper presentation sessions A4–A6 (see the A1–A6 paper session details below)
18:00–20:00	大会晚宴（17:00 开始大巴于学生中心接送）| 地点：白金汉爵酒店 288 厅 Conference banquet; shuttle buses depart from the Student Center beginning at 17:00	Location: Hall 288, Shanghai Minhang Platinum HanJue Hotel

11 月 7 日 星期六
Saturday, 7 November

主旨报告与平行活动
Keynote Addresses and Parallel Activities

时间 Time	活动安排 Activity
08:00–09:00	会议报到	地点：学生中心一楼 Conference check-in	Location: First floor, Student Center Building
09:00–09:40	主旨报告 III Prof. Laszlo Major	学生中心 A100 芬兰图尔库大学、西南芬兰 LUMA 中心 题目：系统性信任与认知灵活性：芬兰 LUMA 生态系统中科学教育的可持续发展 Keynote Address III — Prof. Laszlo Major	Student Center A100 Southwest Finland LUMA Centre and Department of Computing at the University of Turku. Title: Systemic trust and cognitive flexibility: Sustaining science education in the Finnish LUMA ecosystem
09:40–10:20	主旨报告 IV Prof. Manolis Mavrikis	学生中心 A100 英国伦敦大学学院 题目：人工智能教育技术中的主体性设计 Keynote Address IV — Prof. Manolis Mavrikis	Student Center A100 University College London Title: Designing for agency in AI-based edtech
10:20–10:40	茶歇 Tea break
10:20–12:20	论文发表平行分会场 B1–B4（详见后附 B1-B4 论文分组） Parallel paper presentation sessions B1–B4 (see the B1–B4 paper session details below)
12:20–13:30	午餐 Lunch
13:00-13:30	Wiley 出版社面对面 (B409) Wiley Meet-the-Publisher Session (B409)
13:30–14:30	中英文工作坊（预约链接：https://wj.sjtu.edu.cn/q/6bpweuK8）； 机器人教育论坛（B409）：构建全球 K-12 计算机科学与工程教育贯通体系：基于 VEX 机器人的案例研究 Chinese- and English-language workshops (Register at https://wj.sjtu.edu.cn/q/6bpweuK8); Robotics Education Forum (B409): Establishing a Global K-12 Continuum for Computer Science and Engineering Education: A Case Study of the VEX Robotics Framework
14:30–15:00	茶歇 Tea break
15:00–17:00	英文期刊主编对话（C402）；中文期刊主编对话（C202）；STEM 开源硬件与工程教育工作坊（点击预约：https://wj.sjtu.edu.cn/q/xFDVfwge；B409）；论文发表 C4 International Journal Editors' Dialogue (C204); Chinese Journal Editors' Dialogue (C202);STEM Open-Source Hardware and Engineering Education Workshop (Register at: https://wj.sjtu.edu.cn/q/xFDVfwge; B409))； and paper presentations session C4

17:30–20:00	晚餐	地点：学术活动中心馨园餐厅 Dinner	Location: Xinyuan Restaurant, Academic Activity Center

11 月 8 日 星期日

Sunday, 8 November

论文发表与闭幕

Paper Sessions and Closing

时间 Time	活动安排 Activity
09:00–11:00	论文发表平行分会场 D1–D4（详见后附 D1-D4 论文分组） Parallel paper presentation sessions D1–D4 (see the D1–D4 paper session details below)
11:00–11:20	茶歇 Tea Break
11:20–12:00	闭幕式	学生中心 A100 Closing ceremony	Student Center A100
12:00	午餐（外带） Lunch (takeaway)

工作坊与展示

Workshops and Showcases

1. 海报展示丨11 月 6 日 13:30–14:30丨地点：学生中心一楼展区

1. Poster Session | 6 November, 13:30–14:30 | First-Floor Exhibition Area, Student Center Building

P0025	**The Possibilities of AI Glasses in STEM Education: A Literature Review and Future Teaching Applications** Sheng-Yi Wu (National Tsing Hua University)
P0034	**A Systematic Literature Review on the Integration of Design Thinking and STEM Education in K–12 Settings** Yongqi Huang, Lin Lin, Yilin Cheng, Ai Da, Meng Huang (College Of Education, Shanghai Normal University)
P0051	**Unpacking Mathematics Complexity: A Case Study of Mathematics Preservice Teachers' Teaching of Area Concepts** Ying Zhang (The Education University Of Hong Kong); Wei Liang, Qing Yan (Hubei University); Lingyun Huang (The Education University Of Hong Kong)
P0059	**STEAM Play: Building Inquiry, Emotion, and Non-Cognitive Skills for the AI Era** Vilas Wuwongse (Mahasarakham Univeristy)
P0062	**Principle-Based Teacher Professional Development: Advancing Teachers' Cognitive Development in Knowledge Building*** Chih-Hsuan Chang (Kaohsiung University Of Science And Technology); Cing-Sin Lin, Huang-Yao Hong (Chengchi University)
P0089	**指向幼儿艺术素养发展，项目式学习的设计与实施——以漳州非遗剪瓷雕 C-STEAM 项目为例** **Designing and Implementing Project-Based Learning for Young Children's Artistic Literacy: The Zhangzhou Intangible Cultural Heritage C-STEAM Porcelain Mosaic Project** 徐翔, 许红玲 (闽南师范大学漳州台商投资区附属幼儿园)
P0090	**STEAM 视域下幼儿探究能力培养：五步法课程设计与循证评价*** **Cultivating Young Children's Inquiry Skills from a STEAM Perspective: Five-Step Curriculum Design and Evidence-Based Evaluation** 赵静, 孙晓雷, 李松泰, 黄晓倩 (南宁市青秀区梅沙幼儿园)
P0104	**汽车应急智能破窗装置** **Intelligent Emergency Car Window-Breaking Device** 刘冠宇, 周宇浩, 刘嘉焱 (佛山市南海区石实实验学校)
P0105	**应用于语音识别和视觉识别的智能中药柜** **Smart Traditional Chinese Medicine Cabinet for Speech and Visual Recognition** 罗冠辉, 陆汉豪, 陈景熙 (佛山市南海区石实实验学校)

2. WRO 未来发明家展示丨11 月 6 日 13:30–14:30丨地点：学生中心一楼展区

2. WRO Future Innovators Showcase | 6 November, 13:30–14:30 | First-Floor Exhibition Area, Student Center Building

P0131	**塑影新生——松江干饭队（WRO 未来发明家）** **Reviving Shadow Puppetry through 3D Printing - Songjiang GanFan Team (WRO Future Innovators)** 洪承颢, 黄美君 (上海台商子女学校); 戴筱雅 (上海市松江区仓桥学校)

3. 中英文工作坊丨11 月 7 日 13:30–14:30丨地点：学生中心

3. Chinese- and English-Language Workshops | 7 November, 13:30–14:30 | Student Center Building

预约链接：https://wj.sjtu.edu.cn/q/6bpweuK8

Register at: https://wj.sjtu.edu.cn/q/6bpweuK8

P0057 Room C202	**Co-Creating Powerful Knowledge in STEM: A 5C Model Workshop for Practice Change** Premnadh Madhava Kurup (Latrobe University Melbourne); Arks Srinivas (Indian Institute Of Technology, Kanpur India); Xia Li (Latrobe University Melbourne)
P0106 Room B205	**Number Talks in the K–12 Classroom: Applications and Insights from Research*** Richelle Marynowski (University Of Lethbridge); Nicki Nightingale (Peace Wapiti School Division)
P0115 Room C204	**From Dirt to Kinship: A Collective Intelligence Workshop to Cultivate Soil Literacy for Sustainable Development*** Yan Zhu (Shanghai Baoshan Center For Environmental Education)

论文分组

Paper Sessions

长篇论文 20 分钟（报告 15 分钟、问答 5 分钟）；短篇论文 15 分钟（报告 12 分钟、问答 3 分钟）。

Full papers: 20 minutes (15-minute presentation and 5-minute Q&A). Short papers: 15 minutes (12-minute presentation and 3-minute Q&A).

论文发表分会场总览

Paper Session Overview

分会场 Session	日期与时间 Date and Time	语言与篇数 Language and Papers	主题 Theme	教室与主持人 Room and Chair
A1	11 月 6 日 13:00–14:30 6 November 13:00–14:30	英语丨6 篇 English | 6 papers	**数字技术、虚拟现实与 STEM 学习创新** **Digital Technologies, VR and Innovation in STEM Learning**	C204丨吴振华 C204 | Zhenhua Wu
A2	11 月 6 日 13:00–14:30 6 November 13:00–14:30	中文丨5 篇 Chinese | 5 papers	**人智协同与 AI 赋能的 STEM 学习** **Human–AI Collaboration and AI-Enhanced STEM Learning**	C202丨陈晶 C202 | Jing Chen
A3	11 月 6 日 13:00–14:15 6 November 13:00–14:15	中文丨5 篇 Chinese | 5 papers	**全国中小学工程教育第二届论坛优秀论文发表报告** **Outstanding Paper Presentations at the Second National Primary and Secondary School Engineering Education Forum**	B409丨余天佐 B409 | Tianzuo Yu
A4	11 月 6 日 15:00–17:00 6 November 15:00–17:00	英语丨6 篇 English | 6 papers	**人工智能增强的 STEM 学习与证据** **AI-Enhanced STEM Learning and Evidence**	C202丨戴海敏 C202 | Haimin Dai
A5	11 月 6 日 15:00–17:00 6 November 15:00–17:00	英语丨6 篇 English | 6 papers	**课程设计、工程与高阶思维** **Curriculum Design, Engineering and Higher-Order Thinking**	B205丨马跃 B205 | Yue Ma
A6	11 月 6 日 15:00–17:00 6 November 15:00–17:00	中文丨6 篇 Chinese | 6 papers	**K–12 课程实践与工程教育** **K–12 Curriculum Practice and Engineering Education**	C204丨关瑜桢 C204 | Yuzhen Guan
B1	11 月 7 日 10:20–12:20 7 November 10:20–12:20	英语丨3 篇 English | 3 papers	**可持续性、系统思维与可持续发展教育** **Sustainability, Systems Thinking and ESD**	C202丨芦畅 C202 | Chang Lu
B2	11 月 7 日 10:20–12:20 7 November 10:20–12:20	英语丨5 篇 English | 5 papers	**教师发展、职业生涯与学习路径** **Teacher Development, Careers and Learning Pathways**	B205丨岑逾豪 B205 | Yuhao Cen

分会场 Session	日期与时间 Date and Time	语言与篇数 Language and Papers	主题 Theme	教室与主持人 Room and Chair
B3	11 月 7 日 10:20–12:20 7 November 10:20–12:20	中文丨6 篇 Chinese | 6 papers	**教师发展、文化与教育政策** **Teacher Development, Culture and Education Policy**	C204丨刘华聪 C204 | Huacong Liu
B4	11 月 7 日 10:20–12:20 7 November 10:20–12:20	英语丨4 篇 English | 4 papers	**公平、多样性与学习者发展** **Equity, Diversity and Learner Development**	B409丨杨倩茹 B409 | Qianru Yang
C4	11 月 7 日 15:00–17:00 7 November 15:00–17:00	中文丨6 篇 Chinese | 6 papers	**数字技术与智能工程课程实践** **Digital Technologies and Intelligent Engineering Curriculum Practice**	B205丨徐斌艳 B205 | Binyan Xu
D1	11 月 8 日 09:00–11:00 8 November 09:00–11:00	英语丨3 篇 English | 3 papers	**人工智能应用、机制与学习迁移** **AI Applications, Mechanisms and Learning Transfer**	C202丨曹鹭 C202 | Lu Cao
D2	11 月 8 日 09:00–11:00 8 November 09:00–11:00	英语丨5 篇 English | 5 papers	**STEM 战略、机构与未来学习生态系统** **STEM Strategy, Institutions and Future Learning Ecosystems**	B205丨崔淇 B205 | Qi Cui
D3	11 月 8 日 09:00–11:00 8 November 09:00–11:00	中文丨5 篇 Chinese | 5 papers	**学校系统建设与技术工程课程** **School System Development and Technology and Engineering Curricula**	C204丨余天佐 C204 | Tianzuo Yu
D4	11 月 8 日 09:00–11:00 8 November 09:00–11:00	中文丨5 篇 Chinese | 5 papers	**可持续项目、科学解释与循证学习** **Sustainability Projects, Scientific Explanation and Evidence-Based Learning**	B409丨严晓梅 B409 | Xiaomei Yan

A1–A3 11 月 6 日论文分会场

A1–A3 Paper Sessions on 6 November

A1 数字技术、虚拟现实与 STEM 学习创新

A1 Digital Technologies, VR and Innovation in STEM Learning

日期与时间 Date and Time	语言 Language	教室 Room	主持人 Chair
11 月 6 日 13:00–14:30	6 篇 6 November 13:00–14:30 | 6 papers	英语 English	C204 C204	吴振华 Zhenhua Wu

P0048 Full paper	**Virtual Reality and AI Agents: Unlocking Elementary Students' Creative Problem-Solving in STEM*** Muhua Zhang, Shuanglin Gu, Runyan Wang (Capital Normal University); Weiwei Hao (Yuquan Primary School Affiliated to the Chinese Academy of Sciences)
P0023 Full paper	**Improvement of STEM Extracurricular Activity of Primary School Students in Western Australia Using 3D Printing Workshops** Lisa Nguyen, Yu Dong (Curtin University)
P0043 Short paper	**Development of a Space Technology VR Curriculum Based on the STEAM Framework** Hsiang-Ni Tsai (Department of Education and Learning Technology, National Tsing Hua University); Sheng-Yi Wu (Center for Teacher Education, National Tsing Hua University)
P0076 Short paper	**A Case Study of Database Systems Acquisition Using AI** Eric Jing Guo, Ruth Xiaoqing Guo, Stephen E Gareau, Brennan Maracle, Farhanaakter Mim (Buffalo State University, Usa)
P0091 Short paper	**Bridge: A Reflective Framework for Digital Mathematics and Indigenous Perspectives in Teacher Education** Huayu Vicky Punter, Grace Sarra (Queensland University of Technology)
P0050 Full paper	**Performance for Her, Recognition for Him: Gendered Pathways from Informal STEM Learning to Entrepreneurial Intention via Science Identity** Yun Zhou (Shanghai Jiao Tong University); Zhouyarou Peng (Central South University)

A2 人智协同与 AI 赋能的 STEM 学习

A2 Human–AI Collaboration and AI-Enhanced STEM Learning

日期与时间 Date and Time	语言 Language	教室 Room	主持人 Chair
11 月 6 日 13:00–14:30	5 篇 6 November 13:00–14:30 | 5 papers	中文 Chinese	C202 C202	陈晶 Jing Chen

P0121 长篇论文 / Full paper	**面向教师-AI 协同支架的智能辅导系统设计与实现** **Design and Implementation of an Intelligent Tutoring System with Teacher-AI Collaborative Scaffolding** 文静, 吴永和 (华东师范大学教育信息技术学系); 卢毅 (复旦大学高等教育研究所)
P0087 短篇论文 / Short paper	**中小学教师人机协同 STEM 教学胜任力模型与评价体系建构** **Developing a Competency Model and Evaluation System for Human-AI Collaborative STEM Teaching among Primary and Secondary School Teachers** 李珍 (天津市教育科学研究院)
P0101 短篇论文 / Short paper	**在解题前：资优生 STEM 探究问题定向之 AI 鹰架设计** **Before Problem Solving: Designing AI Scaffolding for Gifted Students' Problem Orientation in STEM Inquiry** 郑凯馨 (台湾清华大学 教育与学习科技学系); 吴声毅 (台湾清华大学 师资培育中心)
P0102 短篇论文 / Short paper	**多智能体赋能小学 STEM 教育研究：协同机制、关键模式及实施保障** **Multi-Agent Empowerment in Primary STEM Education: Collaborative Mechanisms, Key Models and Implementation Supports** Huaiyu Lu (佛山市南海区石实实验学校); Yuyue Zhang (北京大学)
P0112 短篇论文 / Short paper	**人智协同驱动 STEM 游戏化教学：框架设计与实践路径** **Human-AI Collaboration for Gamified STEM Teaching: Framework Design and Practical Pathways** 唐溢 (西北师范大学)

A3 全国中小学工程教育第二届论坛优秀论文发表报告

A3 Outstanding Paper Presentations at the Second National Primary and Secondary School Engineering Education Forum

日期与时间 Date and Time	语言 Language	教室 Room	主持人 Chair
11 月 6 日 13:00–14:15	5 篇 6 November 13:00–14:15 | 5 papers	中文 Chinese	B409 B409	余天佐 Tianzuo Yu

P0135 长篇论文 / Full paper	**我国中小学工程教育的发展现状、挑战与对策建议——基于全国中小学工程教育联盟的实证研究** **The Current State, Challenges and Policy Recommendations for Primary and Secondary School Engineering Education in China: An Empirical Study Based on the National Primary and Secondary School Engineering Education Alliance** 王琳媛, 于歌 (上海交通大学教育学院)
P0153 长篇论文 / Full paper	**指向工程素养的“源生绿境”生态环境课程重构与实践研究** **Reconstruction and Practice of the “Nature-Inspired Green Environment” Eco-Environmental Curriculum Oriented toward Engineering Literacy** 吴学安, 岳玲 (北京市京源学校)
长篇论文 / Full paper	**基于项目式“氛围编程”的初中生软件工程和 AI 素养培养研究** **Developing Middle School Students’ Software Engineering and AI Literacy through Project-Based “Vibe Coding”** 周晓菲, 芦镜羽 (上海交通大学教育学院)
P0152 长篇论文 / Full paper	**大中小协同工程教育模式建构：以优质普通高中为枢纽的实践探索** **Building a Collaborative Engineering Education Model across Universities, Secondary Schools and Primary Schools: A Practice-Based Exploration Centered on High-Quality General High Schools** 徐惠 , 黄发享, 彭景, 查成林, 刘斌 (华中师范大学第一附属中学)
长篇论文 / Full paper	**多主体协同的中小学工程教育生态系统建设研究** **Building a Multi-Stakeholder Collaborative Engineering Education Ecosystem for Primary and Secondary Schools** 朱佳斌, 李兴悦, 潘雨晴 (上海交通大学教育学院)

A4–A6 11 月 6 日论文分会场

A4–A6 Paper Sessions on 6 November

A4 人工智能增强的 STEM 学习与证据

A4 AI-Enhanced STEM Learning and Evidence

日期与时间 Date and Time	语言 Language	教室 Room	主持人 Chair
11 月 6 日 15:00–17:00	6 篇 6 November 15:00–17:00 | 6 papers	英语 English	C202 C202	戴海敏 Haimin Dai

P0052 Full paper	**Can Generative Artificial Intelligence Improve the Learning Performance of STEM Students? A Meta-Analysis** Weizhe Feng (Tianjin University)
P0072 Short paper	**Integrating GenAI Scaffolding into CT-STEM to Promote Content Learning and Problem-Solving in Under-Resourced Primary Schools*** Ya Zhao, Taotao Long (Faculty Of Artificial Intelligence In Education, Central China Normal University)
P0096 Short paper	**AI Refusal in STEM Education: Professional Judgment for Sustainable AI-Enhanced Learning** Jason Zagami (Griffith University)
P0118 Short paper	**How Generative Artificial Intelligence Affects Student Development in STEM Education: A Meta-Analysis** Gang Li, Xiaoju Zhang, Yilin Lu (Northeast Normal University)
P0143 Short paper	**Beyond Infrastructure: Quantifying the Implementation Heterogeneity of K–12 AI Education** Xihuang Lin, Runzhi Chen, Feng-Kuang Chiang (School Of Education, Shanghai Jiao Tong University)
P0042 Full paper	**Changing Mathematics Outcome Trajectories for Diverse Learners: A Cross-Disciplinary Approach** Yan Ping Xin (Purdue University)

A5 课程设计、工程与高阶思维

A5 Curriculum Design, Engineering and Higher-Order Thinking

日期与时间 Date and Time	语言 Language	教室 Room	主持人 Chair
11 月 6 日 15:00–17:00	6 篇 6 November 15:00–17:00 | 6 papers	英语 English	B205 B205	马跃 Yue Ma

P0018 Full paper	**Deep Integration Teaching: An Exploration of “Chinese-Style STEM” Practices in Shanghai*** Mengjie Xu (Shanghan Jingan District School of Education)
P0054 Full paper	**Enhancing University Students’ Higher-Order Thinking through STEM Curriculum Design: A Quasi-Experimental Study*** Liangdong Zheng (Fuzhou University Of International Studies And Trade, Fuzhou, China); Zhong Sun (Capital Normal University, China)
P0081 Full paper	**Disciplinary Language and Collaborative Problem-Solving in Engineering Education*** Milorad Cerovac, Therese Keane (La Trobe University)
P0154 Full paper	**Does Knowing Concepts Ensure Clear Explanations? Assessing Scientific Explanations in an AR-Supported Combustion Classroom** Tianrun Yu, Ping Meng, Yuxin Tan, Su Cai (Beijing Normal University)
P0114 Full paper	**Investigating the Effectiveness of a 6E-Based Engineering-Context Physics Lesson in Senior High School: A Case Study of Projectile Motion*** Yaping Han, Jiabin Zhu (Shanghai Jiao Tong University)
P0035 Short paper	**A Study on the Challenges in the Implementation Process of Collaborative STEM Curricula** Kuen-Yi Lin (National Taiwan Normal University)

A6 K–12 课程实践与工程教育

A6 K–12 Curriculum Practice and Engineering Education

日期与时间 Date and Time	语言 Language	教室 Room	主持人 Chair
11 月 6 日 15:00–17:00	6 篇 6 November 15:00–17:00 | 6 papers	中文 Chinese	C204 C204	关瑜桢 Yuzhen Guan

P0012 长篇论文 / Full paper	**工程思维导向的 STEM 课程评价路径探索——基于科学素养培育的视角*** **Exploring Pathways for Evaluating STEM Curricula Oriented toward Engineering Thinking: A Scientific Literacy Perspective** 邢蓉 (上海市实验学校)
P0148 短篇论文 / Short paper	**基于 CTPF 的智能电机课程设计** **Intelligent Motor Curriculum Design Based on CTPF** 刘文婷, 江丰光 (上海交通大学教育学院)
P0041 短篇论文 / Short paper	**重构校园空间：基于气象主题的 STEM 教育创新实践*** **Reimagining School Spaces: Innovative STEM Education Practice Based on a Meteorology Theme** 赵磊 (上海市七宝中学附属鑫都实验中学)
P0073 短篇论文 / Short paper	**STEM 教育融入小学教育的实践探索与路径研究** **Practical Exploration and Pathways for Integrating STEM Education into Primary Education** 徐云碧 (贵州省贵阳市息烽县云环小学)
P0140 短篇论文 / Short paper	**基于 STEM 的电子温度计创新项目实践** **Practice of an Innovative Electronic Thermometer Project Based on STEM** 张小琳 (清华大学附属中学)
P0046 短篇论文 / Short paper	**从餐桌到地球：指向 SDGs 的 STEM 课程设计与实践** **From Table to Planet: Systematic Design and Practice of a STEM Curriculum Oriented toward the SDGs*** 刘李 （华东师大泰达附属学校），崔雪，濮林峰 （食趣自然（北京）文化传播有限公司）

B1–B4 11 月 7 日上午论文分会场

B1–B4 Morning Paper Sessions on 7 November

B1 可持续性、系统思维与可持续发展教育

B1 Sustainability, Systems Thinking and ESD

日期与时间 Date and Time	语言 Language	教室 Room	主持人 Chair
11 月 7 日 10:20–12:20	3 篇 7 November 10:20–12:20 | 3 papers	英语 English	C202 C202	芦畅 Chang Lu

P0061 Full paper	**Exploring Preservice Elementary School Teachers' Discourse on Ecological Transformation Education in Debate Activities Using Documentary Films*** Youngmi Choi (Jeju National University)
P0065 Full paper	**Epistemic Tensions and Collaborative Systems Reasoning in Adolescent Complex Systems Discourse: Insights from Water Sustainability Inquiry*** Bin Zhang (Zhengzhou Huimin Foreign Languages School); Rui Zhang (Beijing Foreign Studies University)
P0122 Short paper	**Can a Card Game Change Your Relationship with Soil? A Pilot Study of Collective Intelligence Workshop in Soil Science Education*** Yan Zhu (Shanghai Baoshan Center For Environmental Education); Junqing Zhai (Zhejiang University (Department Of Education)); Lingqiong Wu (Nantong University (Department Of Management))

B2 教师发展、职业生涯与学习路径

B2 Teacher Development, Careers and Learning Pathways

日期与时间 Date and Time	语言 Language	教室 Room	主持人 Chair
11 月 7 日 10:20–12:20	5 篇 7 November 10:20–12:20 | 5 papers	英语 English	B205 B205	岑逾豪 Yuhao Cen

P0063 Full paper	**STEM Integration in Pre-Service Teacher Education: A Systematic Review of Practices and Effects*** Yuqing Liu, WONG Lai-ngok, Jocelyn (The Chinese University of Hong Kong)
P0030 Short paper	**Internationalized STEM Learning Environments and Graduate Employability: Evidence from Sino-Foreign Universities in China** Anan Chen (Peking University)
P0060 Short paper	**Female Leadership Development in STEM Competition Teams*** Zhuo Wang, Haimin Dai (Shanghai Jiao Tong University)
P0113 Short paper	**What Career Competences Are We Developing for Engineering Doctoral Students? Evidence from Policy Documents and Institutional Practice** Shuhua Chen (Shanghai Jiao Tong University)
P0130 Short paper	**Grades Are Not Enough: Self-Efficacy, School Climate, and STEM Career Aspirations among Hungarian Secondary Students*** Blanka Novák (Institute Of Biology - Eszterházy Károly Catholic University); Tünde Lengyelne Dr. Molnar (Institute Of Infromatics - Eszterházy Károly Catholic University)

B3 教师发展、文化与教育政策

B3 Teacher Development, Culture and Education Policy

日期与时间 Date and Time	语言 Language	教室 Room	主持人 Chair
11 月 7 日 10:20–12:20	6 篇 7 November 10:20–12:20 | 6 papers	中文 Chinese	C204 C204	刘华聪 Huacong Liu

P0111 短篇论文 / Short paper	**中小学 STEM 教育特色学校建设指导细则研究** **Guidelines for Developing Distinctive STEM Schools in Primary and Secondary Education** 李湘黔 (湖南师范大学附属中学)
P0038 长篇论文 / Full paper	**从“不会教”到“一起学”：非理工科背景的小学教师的"跨越力"行动研究*** **From “Unable to Teach” to “Learning Together”: An Action Study of Boundary-Crossing Capacity among Primary School Teachers without STEM Backgrounds** 穆敏娟，刘建伟 (清华大学附属小学昌平学校); 唐肖肖 ， 林长山 (清华大学附属小学)
P0092 长篇论文 / Full paper	**全球 STEM 教师短缺：发生逻辑与问题启示*** **Global STEM Teacher Shortages: Underlying Dynamics and Implications** 李鑫 (华东师范大学教育管理系); 李廷洲 (上海师范大学国际教师教育中心); 姜澄 (中共浙江省委党校人文经济学研究中心); 姚凤 (上海市七宝明强小学)
P0117 长篇论文 / Full paper	**认知文化差异视域下的 STEM 教育策略探究** **STEM Education Strategies from the Perspective of Cognitive and Cultural Differences** 胡友伟 (唐山师范学院)
P0138 短篇论文 / Short paper	**高校教师 AI 教学素养问卷开发与初步验证** **Development and Preliminary Validation of a University Teachers’ AI Teaching Literacy Questionnaire** 陈润枝，邱意弘，江丰光 (上海交通大学)
P0058 短篇论文 / Short paper	**韩国 STEAM 教育教师素养研究** **Teacher Competencies in STEAM Education in South Korea** 肖林朔 (东北师范大学)

B4 公平、多样性与学习者发展

B4 Equity, Diversity and Learner Development

日期与时间 Date and Time	语言 Language	教室 Room	主持人 Chair
11 月 7 日 10:20–12:20	4 篇 7 November 10:20–12:20 | 4 papers	英语 English	B409 B409	杨倩茹 Qianru Yang

P0033 Full paper	**Equity Challenges in Informal STEM Education and Policy Responses: A Diagnostic Analysis of U.S. K–12 Contexts** Fan Yang, Yiling Cheng (Beijing Foreign Studies University)
P0028 Short paper	**Investigating Engineering Students' Experiences of Productive Failure in an Indonesia Higher Education Context** Aliv Faizal Muhammad (Politeknik Elektronika Negeri Surabaya); James P Davis (Queensland University Of Technology)
P0070 Short paper	**Bridging Schools and Non-Formal STEM Centres for Inclusive and Sustainable Learning: A Pilot Study Design from Slovenia** Igor Pesek, Boris Aberšekl, Andrej Flogie (University Of Maribor)
P0128 Short paper	**Reference Answers and Explanations (RAE)-Guided Self- and Peer-Assessment in Chinese General Technology STEM Education*** Yao Xu (Beijing Normal University)

C4 11 月 7 日下午论文分会场

C4 Paper Session on 7 November Afternoon

C4 数字技术与智能工程课程实践

C4 Digital Technologies and Intelligent Engineering Curriculum Practice

日期与时间 Date and Time	语言 Language	教室 Room	主持人 Chair
11 月 7 日 15:00–17:00丨6 篇 7 November 15:00–17:00 | 6 papers	中文 Chinese	B205 B205	徐斌艳 Binyan Xu

P0069 长篇论文 / Full paper	**高中信息技术 STEM 课程设计与评估——以智能车库为例*** **Design and Evaluation of a High School Information Technology STEM Curriculum: The Smart Garage as an Example** 甘建刚、李学梅、姚雯雯 (重庆市江北中学校)
P0126 长篇论文 / Full paper	**虚实融合考察对初中学生循证能力的影响** **Effects of Blended Virtual and Physical Fieldwork on Middle School Students' Evidence-Based Reasoning** 张奕昂 (上海市南洋初级中学)
P0053 长篇论文 / Full paper	**基于 SolidWorks 技术的高中木工劳动课程的设计与实践** **Design and Practice of a High School Woodworking Labor Education Course Using SolidWorks** 王剑 (广东实验中学)
P0137 长篇论文 / Full paper	**基于开源硬件的科创课程对中小学学生创造力的影响研究——来自华东某市四区的调查** **Effects of an Open-Source Hardware-Based Science and Innovation Curriculum on Primary and Secondary School Students' Creativity: Evidence from a Survey of Four Districts in an Eastern Chinese City** 杨亦霏(上海交通大学);田昊轩, 徐晓君(上海市教育委员会教育技术装备中心)
P0124 短篇论文 / Short paper	**STEM 教育中的跨学科实践探索——以机械臂教学为例** **Interdisciplinary Practice in STEM Education: A Robotic Arm Teaching Example** 冯乾 (上海市晋元高级中学附属学校); 王世达 (上海市普陀区教育学院)
P0011 短篇论文 / Short paper	**双减政策下 5E 教学法融入 STEM 校本课程的实践研究** **A Practical Study of Integrating the 5E Instructional Model into a School-Based STEM Curriculum under the Double Reduction Policy** 葛安安 (北京市和平街第一中学)

D1–D4 11 月 8 日上午论文分会场

D1–D4 Morning Paper Sessions on 8 November

D1 人工智能应用、机制与学习迁移

D1 AI Applications, Mechanisms and Learning Transfer

日期与时间 Date and Time	语言 Language	教室 Room	主持人 Chair
11 月 8 日 09:00–11:00	3 篇 8 November 09:00–11:00 | 3 papers	英语 English	C202 C202	曹鹭 Lu Cao

P0097 Full paper	**AI-Enhanced STEM Learning as Disciplinary Integration and Transfer*** Jason Zagami (Griffith University)
P0108 Short paper	**How Does Generative Artificial Intelligence Empower the Research Capacity of University Teachers and Students? The Mediating Role of AI Use Styles*** Yingqi Hu, Rui Ding (Northeast Normal University)
P0109 Short paper	**A Study on Agent Design for ESD-STEM Education** Yiqi Chen, Guangtao Xu (Hangzhou Normal University)

D2 STEM 战略、机构与未来学习生态系统

D2 STEM Strategy, Institutions and Future Learning Ecosystems

日期与时间 Date and Time	语言 Language	教室 Room	主持人 Chair
11 月 8 日 09:00–11:00	5 篇 8 November 09:00–11:00 | 5 papers	英语 English	B205 B205	崔淇 Qi Cui

P0014 Full paper	**From Priority to Strategy: The Strategic Transformation of the U.S. STEM Education** Yuhang Li (Dalian University Of Technology School Of Economics And Management); Liang Wang (Dalian University Of Technology Graduate School Of Education); Shunshun Hu (Anhui University School Of Marxism)
P0068 Short paper	**Enabling Conditions for Knowledge Co-Creation in World-Class Universities: A Framework** Premnadh Madhava Kurup (Latrobe University Melbourne); Anjali Yadav (Indian Institute Of Technology, Kanpur India)
P0100 Short paper	**Integrating XIPU AI into Collaborative Learning in EAP Classrooms: A Case Study of Teaching Practice** Chaonan Xu (Xi'an Jiaotong-Liverpool University)
P0123 Short paper	**The Human-Machine Oasis: Constructing a Sustainable Symbiotic Ecosystem for Future AI-STEM Education** Liqiao Nong (Guangxi Polytechnic Of Construction); Mustafa Ozguven (Xi'an Jiaotong-Liverpool University)
P0103 Short paper	**Redesigning Grade 8 Science Tasks in Oman to Promote Reflective STEM Learning in the Age of Artificial Intelligence** Fatma Ali Alduhani (Ministry Of Education)

D3 学校系统建设与技术工程课程

D3 School System Development and Technology and Engineering Curricula

日期与时间 Date and Time	语言 Language	教室 Room	主持人 Chair
11 月 8 日 09:00–11:00	5 篇 8 November 09:00–11:00 | 5 papers	中文 Chinese	C204 C204	余天佐 Tianzuo Yu

P0082 长篇论文 / Full paper	**高中技术与工程课程中促进学生职业生涯发展的策略研究** **Strategies for Promoting Students' Career Development in High School Technology and Engineering Courses** 郭幸君 (上海市七宝中学)
P0085 长篇论文 / Full paper	**九年一贯制学校 STEM 教育的系统构建与实践路径*** **Systemic Development and Implementation Pathways for STEM Education in K–9 Schools** 陈勇, 顾鑫城 (上海师范大学附属第五嘉定实验学校; 上海师范大学); 马语鑫, 许璐 (上海师范大学附属第五嘉定实验学校)
P0125 长篇论文 / Full paper	**人工智能与开源硬件协同的 STEM 实验课程开发研究——以高中物理《向心加速度》为例*** **Developing a STEM Laboratory Course Integrating AI and Open-Source Hardware: High School Physics 'Centripetal Acceleration' as an Example** 周茂华 (深圳市第二高级中学)
P0093 短篇论文 / Short paper	**九年制学校开源硬件赋能下 STEM 教育的贯通设计与实施*** **Coherent Design and Implementation of STEM Education Enabled by Open-Source Hardware in K–9 Schools** 冯乾 (上海市晋元高级中学附属学校); 王世达 (上海市普陀区教育学院)
P0022 Short paper	**环境及可持续发展视域下的 A-STEM 课程校本实践*** **School-Based Practice of A-STEM Curriculum from the Perspective of Environment and Sustainable Development*** 陈恣，刘李（华东师大泰达附属学校）

D4 可持续项目、科学解释与循证学习

D4 Sustainability Projects, Scientific Explanation and Evidence-Based Learning

日期与时间 Date and Time	语言 Language	教室 Room	主持人 Chair
11 月 8 日 09:00–11:00	5 篇 8 November 09:00–11:00 | 5 papers	中文 Chinese	B409 B409	严晓梅 Xiaomei Yan

P0078 长篇论文 / Full paper	**生物学科学解释能力测评框架的构建*** **Developing an Assessment Framework for Scientific Explanation Competence in Biology** 陈紫琦 (东北师范大学教育博士兼长春市第七中学生物教师); Rui Ding (东北师范大学教育学部)
P0056 长篇论文 / Full paper	**科研级设备赋能高中 STEM 教育：跨学科课程实践*** **Research-Grade Equipment Empowering High School STEM Education: Interdisciplinary Curriculum Practice** 宁磊, 石华军, 姜文新 (青岛市实验高级中学)
P0044 短篇论文 / Short paper	**传粉昆虫保护视角下初中 STEM 课程开发与实施——以《昆虫旅馆》项目为例** **Developing and Implementing a Middle School STEM Curriculum through Pollinator Conservation: The 'Insect Hotel' Project** Mengdan Li (上海市实验学校)
P0120 短篇论文 / Short paper	**非正式学习情境中的可持续 STEM 教育：校外教育项目化实践的上海案例** **Sustainable STEM Education in Informal Learning Settings: A Shanghai Case of Project-Based Out-of-School Education** 成洁瑶 (上海市宝山区青少年活动中心)
P0080 短篇论文 / Short paper	**高等教育可持续发展的时代意蕴与行动选择** **The Contemporary Significance of Sustainable Development in Higher Education and Pathways for Action** 赵映川（湖北大学）

注：标有星号（*）的论文为优秀论文候选。

Note: Papers marked with an asterisk (*) are candidates for the Outstanding Paper Award.

周六下午平行活动

Saturday Afternoon Parallel Sessions

C1–C3 为周六下午同时进行的平行场次，参会者可任选一个参加。

C1–C3 run in parallel on Saturday afternoon. Participants may choose any one session.

场次 Session	时间与地点 Time and Venue	活动内容 Session Details
C1 **英文期刊主编对话** **International Journal Editors' Dialogue**	11 月 7 日 15:00–17:00 · 语言：英语 · 教室：C204 · 主持人：戴海敏 7 November 15:00–17:00 · Language: English · Room C204 · Chair: Haimin Dai	British Journal of Educational Technology Research in Science Education Distance Education IEEE Transactions on Education
C2 **中文期刊主编对话** **Chinese Journal Editors' Dialogue**	11 月 7 日 15:00–17:00 · 语言：中文 · 教室：C202 · 主持人：王宇 7 November 15:00–17:00 · Language: Chinese · Room C202 · Chair: Yu Wang	现代远程教育研究 Modern Distance Education Research 现代教育技术 Modern Educational Technology 中国远程教育 Distance Education in China 开放教育研究 Open Education Research
C3 **STEM 开源硬件与工程教育工作坊** **STEM Open-Source Hardware and Engineering Education Workshop**	11 月 7 日 15:00–17:00 · 语言：中文 · 教室：B409 · 主持人：田昊轩 7 November 15:00–17:00 · Language: Chinese · Room B409 · Chair: Haoxuan Tian	扫码查看 Scan for details