

中国科学院高能物理研究所
Institute of High Energy Physics, Chinese Academy of Sciences

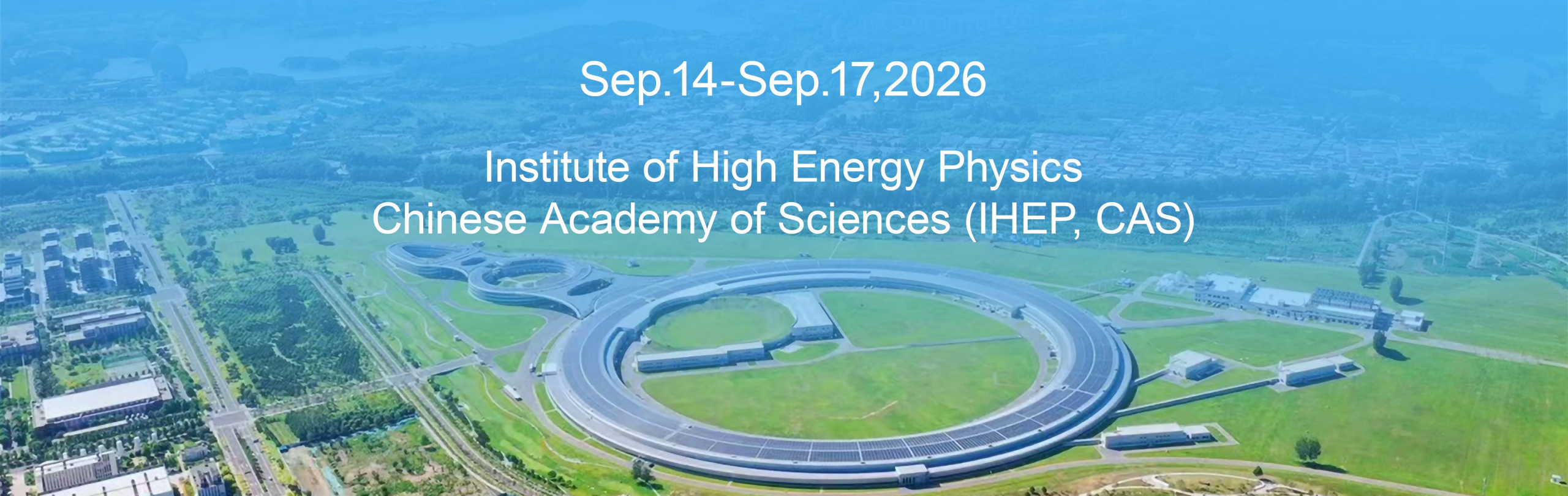


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2026 MicroTCA/ATCA Workshop for Large Scientific Facility Control

Sep.14-Sep.17,2026

Institute of High Energy Physics
Chinese Academy of Sciences (IHEP, CAS)



Outlook of 2026 MTCA

2

Participants: 85

Talks: 38

Sponsor: 9

Days: 4

Agenda review

Date	Agenda
Sep 14 Mon	Registration, Opening, Tutorial
Sep 15 Tue	2 keynote ,12 technical talks
Sep 16 Wed	Talks · Site visit · Free talk
Sep 17 Thu	Talks · Closing



Thank you to every participant for being here.

Talk of 2026 MTCA

2

38 reports: 3 keynote, 4 Training

Keynote :

An introduction of IHEP and the current status of HEPS(Wei Lu)

Accelerator facilities at DESY in Hamburg(Holger Schlarb)

**Design of MicroTCA-based Digital Twin System for Accelerator Systems
(Paul Chu)**

Training (Inc. Hands-on)

MicroTCA Management System : Backplane , PCI Express , and Point-to-Point Links(Giamarco Ricci)

Hans-on training(Zhang jin,Liu Fang)

Next-Generation MTCA Platform and Advanced Cooling Solution for large Scientfic Facilities(Alfonso Liu)

System Implementation and Integration(Gan Nan and Long Wei)



Talk of 2026 MTCA

2

Talks: 31 (incl. 5 remote)

Tutorial & Hands-on

MTCA management tutorial • hands-on chassis training
Getting started with MicroTCA: management backplane and hands-on practice
Real chassis exercises with experts — ideal for newcomers

LLRF & RF Systems

Linac & ring LLRF • RFSoc digitizers • cavity simulator & conditioning
RF control for linacs and rings — the core topic, incl. CSNS-II and HEPS
Covers HALF, S3FEL, IMP and CSNS-II linac systems

Timing & Synchronization

Timing systems • event receivers • sub-ns precision clocks
Precision clocks and event distribution across HEPS, CSNS-II and KVG
Sub-ns MCH time capability and timing RTM upgrades

Beam Diagnostics & Beamline

BPM electronics • fast orbit feedback • photon beamlines
Beam monitoring, orbit feedback and photon experiment control
CSNS-II BPM, HEPS ATCA BPM and beamline automation

Platforms & Industry Solutions

Chassis platforms • FPGA framework • ecosystem (incl. 2 remote talks)
Hardware platforms, tools and DESY ecosystem — incl. two remote talks
nVent next-gen platform, Struck solutions and FWK framework

Accelerator & Facility Upgrade

CSNS-II control & protection • IASF pre-study • fusion DDAQ
Upgrade plans for CSNS-II and pre-studies of new facilities
Accelerator control modernization and fusion diagnostic platform

Speaker Photos

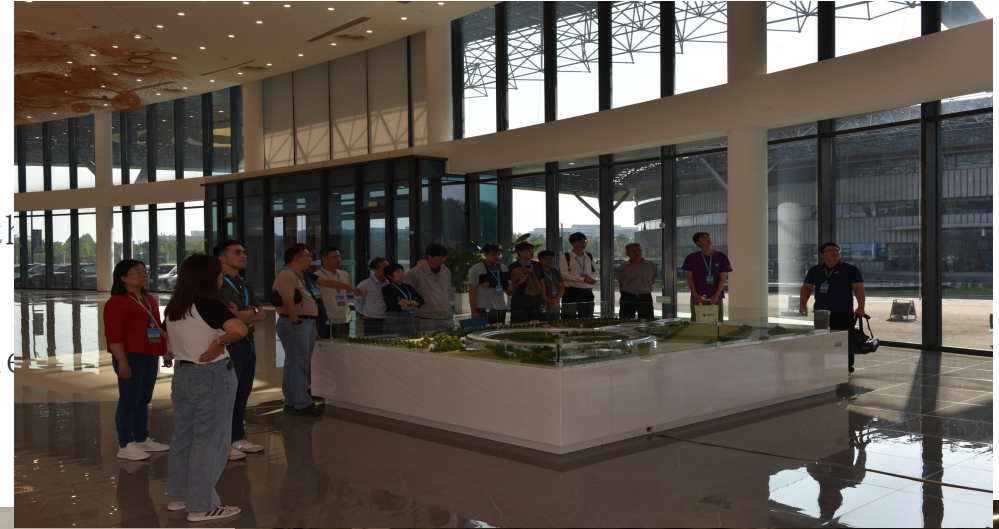


Lab Tour and Round Table Discussion

Lab Tour : HEPS scale model central , control system and several beamline stations

Round table discuss:

- The application of artificial intelligence in MTCA systems in the
- Thoughts on the future development of microTCA
- The application of microTCA in Large-scale scientific facilities



Thanks to

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Chair

Wei Lu — Chair (IHEP)
Holger Schlarb — Co-chair (DESY)
Jingyi Li — Co-chair (IHEP)

LOC

Jingyi Li (IHEP)
Xinpeng Ma (IHEP)
Fang Liu (IHEP)
Lin Bian (IHEP)

Program Committee

Hongrui Cao (IPP)	Xinpeng Ma (IHEP)
Paul Chu (NJU / Suzhou Lab)	Lei Shi (IASF / DICP)
Min Li (IMP)	Yanfeng Sui (IHEP)
Xiao Li (IHEP / CSNS)	Junqiang Zhang (CQU)
Bo Liu (SARI)	Shancai Zhang (USTC / NSRL)
Fang Liu (IHEP)	Yuliang Zhang (IHEP / CSNS)
Gongfa Liu (USTC / NSRL)	Wei Zheng (HUST)
Rong Liu (BNU)	Zeran Zhou (USTC / NSRL)

Conference Affairs

Xinpeng Ma (IHEP)
Fang Liu (IHEP)
Lin Bian (IHEP)
Jin Zhang (IHEP)
Yiran Ma (IHEP)
Fanyu Wang (IHEP)



Many thanks to all committee members and conference Affairs for their effort

Thank you to Industry Sponsor



Thanks for your support and cooperation!

Next workshop in China

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Thank you for joining

2026 MicroTCA/ATCA Workshop for Large Scientific Facility Control

IHEP, Huairou, Beijing • Sep 14 – 17, 2026

See you!



2026 MicroTCA/ATCA Workshop for Large Scientific Facility Control • Thank you for participating