



International Digital Twins of the Ocean Summit 2023

November 9-12, 2023
Xiamen International Conference Center Hotel
Xiamen, China

The Third Announcement

SUBMIT YOUR ABSTRACT NOW!

Deadline: August 20, 2023

EXTENDED

EARLY-BIRD REGISTRATION NOW OPENS!

Deadline: September 14, 2023

INTRODUCTION

Endorsed by the UN Decade of Ocean Science for Sustainable Development (2021-2030), the Digital Twins of the Ocean (DITTO) programme was launched in 2021. The vision of DITTO Programme is to build a world where digital twins of the ocean (DTOs) are used to support ocean protection, ocean governance, and a sustainable blue economy.

The DITTO Summit 2022 held in London was attended by 500+ participants in-person and virtually exploring progress in the development of DITTO capability, considering their requirements for infrastructure, describing potential applications, and defining a path forward.

Taking the great arena of 2023 World Ocean Week in Xiamen, the DITTO Summit 2023 will be co-organised by the Fujian Ocean Innovation Center and State Key Laboratory of Marine Environmental Science (Xiamen University), and to gather global participants with themes focusing on sharing the latest knowledge about DTOs and discussing future actions on advancing and applying them.

We now warmly welcome and encourage everyone who is interested in the topic of DTOs to register and submit an abstract for communication, exchange, and collaboration. Early-bird registration is now available for your participation!

ACADEMIC SESSIONS

(Alphabetical order by first names)

We sincerely call for abstracts submitting to the following sessions for in-depth discussions on advancing and applying DTOs. The submission deadline is extended to August 20, 2023.

1. Ocean Observations & Data Systems

Co-chairs: Marjolaine Krug (Department of Environment, Forestry and Fisheries, South Africa), Toste Tanhua (GEOMAR Helmholtz Centre for Ocean Research Kiel), Yan Du (South China Sea Institute of Oceanology, Chinese Academy of Sciences)

2. Data Analytics & Model Prediction Engines

Co-chairs: Enrique Alvarez (Mercator Ocean International), Eric Chassignet (Florida State University), Pierre Baharel (Mercator Ocean International), Zhao Jing (Ocean University of China)

3. Data Lakes & Interoperability

Co-chairs: Jan-Bart Calewaert (Intergovernmental Oceanographic Commission of UNESCO), Pier Luigi Buttigieg (Helmholtz Metadata Collaboration), Suixiang Shi (National Marine Data and Information Service, China)

4. Interactive Layers & Visualisations

Co-chairs: Jeroen Steenbeek (Ecopath International Initiative), Rongrong Ji (Xiamen University), Zhaoyuan Yu (Nanjing Normal University)

5. Advancing DTO Architectures and Interoperability

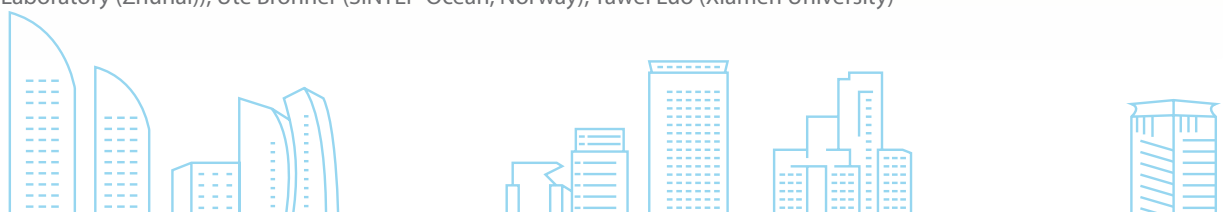
Co-chairs: Jay Pearlman (Institute of Electrical and Electronics Engineers), Ute Brønner (SINTEF-Ocean, Norway), Zhong Peng (East China Normal University)

6. Education, Training & Capacity Development

Co-chairs: Jing Li (Climate and Ocean - Variability, Predictability, and Change), Mônica Muelbert (Universidade Federal de São Paulo), Yuntao Wang (The Second Institute of Oceanography, Ministry of Natural Resources, China)

7. Showcase of DTO Applications

Co-chairs: Delphine Lobelle (Fugro Ltd.), Qinghua Yang (Southern Marine Science and Engineering Guangdong Laboratory (Zhuhai)), Ute Brønner (SINTEF-Ocean, Norway), Yawei Luo (Xiamen University)



MULTI-LEVEL ACTIVITIES

In addition to the parallel academic sessions, the Programme Committee of the Summit designed multi-level activities, i.e. special events and satellite events, to enrich communications among participants from around the world.

Special Event 1: Cross-sectoral Workshop on Advancing and Applying DTOs

The afternoon of November 9, 2023

Despite topics on DTOs will be fully discussed through the Summit sessions, this special event adopts a novel perspective to bring together cross-sectoral participants, ranging from academia, and industry to government, for a wide communication to understand the needs of different users and an in-depth discussion on how to further advance DTO technologies to satisfy those needs. It is expected to foster and build up a novel cross-sectoral partnership for promoting the application of DTOs, as well as for empowering a high-quality development of the blue economy in the region and beyond. This workshop will invite guest speakers from various institutions to share their insights upon invitation and availability. Everyone interested is welcome to join for communication, exchange, and collaboration.

Special Event 2: Digital DEPTH Programme Workshop

The afternoon of November 9, 2023

Endorsed by UN Ocean Decade, the Digital Deep-sea Typical Habitats (Digital DEPTH) Programme is initiated by China Ocean Mineral Resource R&D Association and is led by Dr. Jiabiao Li, Academician of Chinese Academy of Engineering, and jointly planned with 64 marine institutes from 39 countries. The Programme focuses on deep-sea habitats that are most vulnerable to human activities and global changes, which includes seamounts, mid-ocean ridges, continental slopes, and abyssal plains. It aims to meet No.8 Challenge - Digital Ocean identified by the UN Ocean Decade. Themed "Deep in the Ocean, Deep to the Future", this Workshop, as the first one since the Programme has been launched, will invite partners and stakeholders of the Digital DEPTH Programme for keynotes and panel discussions on further understanding deep-sea across-habitat transfer process of the material, energy connectivity, and information; key technologies for intelligent observation and numerical simulation of deep-sea habitats; predictability of disturbances responses of deep-sea habitats and biodiversity for improved deep-sea governance. Everyone interested is welcome to join for detailed information and communication for collaboration.

Special Event 3: The Early Career Ocean Professionals (ECOP) Workshop

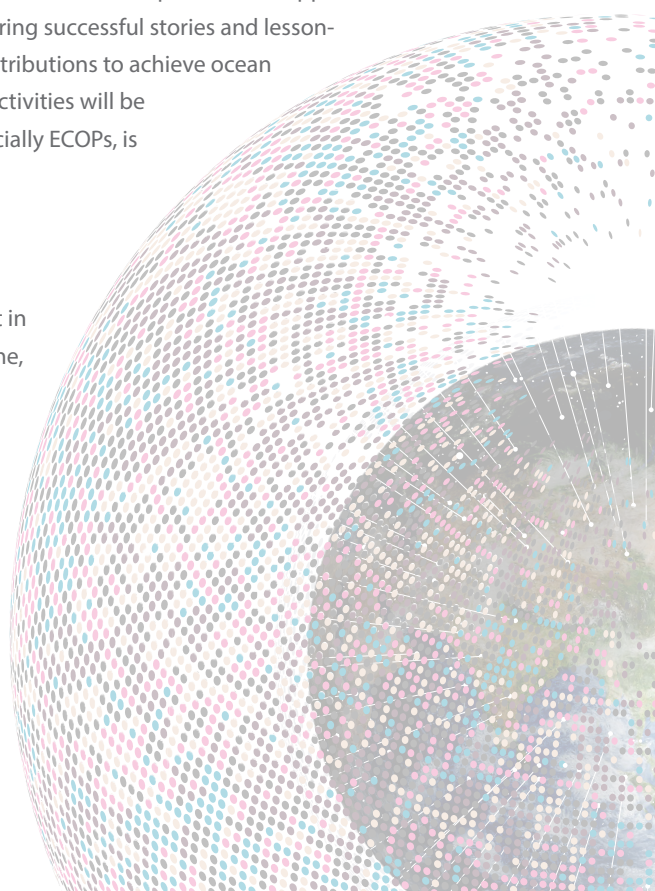
The afternoon of November 9, 2023

The Early Career Ocean Professionals (ECOP) Programme was officially endorsed in June 2021 as a Global Network Programme of the UN Ocean Decade. The ECOP Programme aims to empower ECOPs, who is at the early stage in their career related to the ocean, with meaningful networking to engage with peers and with multi-tier institutes for professional opportunities. Taking the arena of the Summit, the ECOP Workshop is to gather ECOPs for sharing successful stories and lesson-learned experiences with peers, as well as for discussing ECOP's role in and contributions to achieve ocean sustainability in the future years. Interactive and insightful presentations and activities will be organised for promoting and enhancing peer communication. Everyone, especially ECOPs, is cordially invited and strongly advised to join the Workshop.

Satellite Events

October 9 – November 6 & November 13 – 24, 2023

There is a lot of local, regional, disciplinary, and sectoral but also global interest in the concept of "Digital Twins of the Ocean". The initiator of the DITTO Programme, GEOMAR Helmholtz Centre for Ocean Research Kiel, Germany, is now coordinating a worldwide series of satellite virtual events prior to and after the DITTO Summit 2023 for providing a means to reach out to and engage the broader community and exchange ideas virtually, as well as supporting the advancement of actions in a broad area of DITTO. We are now calling for your registration and proposal to host a satellite event on digital twins of the ocean. Everyone who wants to be engaged in the topic of DITTO is invited to organise and register their own satellite event. Please visit <https://ditto.geomar.de> or contact Ms. Joana Kollert (satellites.dittosummit@gmail.com) for satellite event registration.



KEYNOTE SPEAKERS

(Alphabetical order by first names)



Dr. Anne Cohen

Woods Hole Oceanographic
Institution, USA



Dr. Dake Chen

Southern Marine Science and Engineering
Guangdong Laboratory (Zhuhai), China



Prof. Eric Chassignet

Florida State University, USA



Prof. Igor Mayer

Breda University of Applied
Sciences, Netherlands



Dr. Jiabiao Li

The Second Institute of Oceanography,
Ministry of Natural Resources, China



Dr. Joanna Staneva

Helmholtz-Zentrum Hereon,
Germany



Dr. John Siddorn

National Oceanography Centre, UK



Prof. Lixin Wu

Ocean University of China, China



Prof. Minhan Dai

Xiamen University, China



Prof. Nadia Pinardi

University of Bologna, Italy



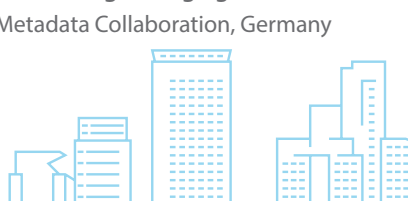
Dr. Pier Luigi Buttigieg

Helmholtz Metadata Collaboration, Germany



Dr. Yoichi Ishikawa

Japan Agency for Marine-Earth
Science and Technology, Japan



PANELISTS

(Alphabetical order by first names)

- Dr. Alain Arnaud (Mercator Ocean International)
- Dr. Fan Wang (Institute of Oceanology, Chinese Academy of Sciences)
- Ir. Jan-Bart Calewaert (Intergovernmental Oceanographic Commission of UNESCO)
- Prof. Jianping Gan (Hong Kong University of Science and Technology)
- Prof. Nianzhi Jiao (Xiamen University)
- Prof. Richard Bellerby (Norwegian Institute for Water Research)
- Dr. Sung Yong Kim (Korea Advanced Institute of Science and Technology)
- Dr. Swadhin Behera (Japan Agency for Marine-Earth Science and Technology)
- Dr. Toste Tanhua (GEOMAR Helmholtz Centre for Ocean Research Kiel)
- Prof. Xiaomeng Huang (Tsinghua University)
- Dr. Yuntao Wang (The Second Institute of Oceanography, Ministry of Natural Resources, China)
- Prof. Zhong Peng (East China Normal University)

More to be added to the list. Stay tuned!

REGISTRATION

How to submit an abstract?

The deadline for abstract submission is now extended to **August 20, 2023**. Please submit your abstract through the official website of the Summit (<https://ditto-summit2023.scimeeting.cn>) before the deadline. If you have any questions, do not hesitate to contact us via email (dittosummit2023@chinastargroup.com).

Fees

1. Early-bird Registration

Student: 1200 CNY / 180 USD




Standard: 2000 CNY / 300 USD

2. Regular Registration

Student: 1500 CNY / 210 USD

Standard: 2500 CNY / 350 USD

Important Dates

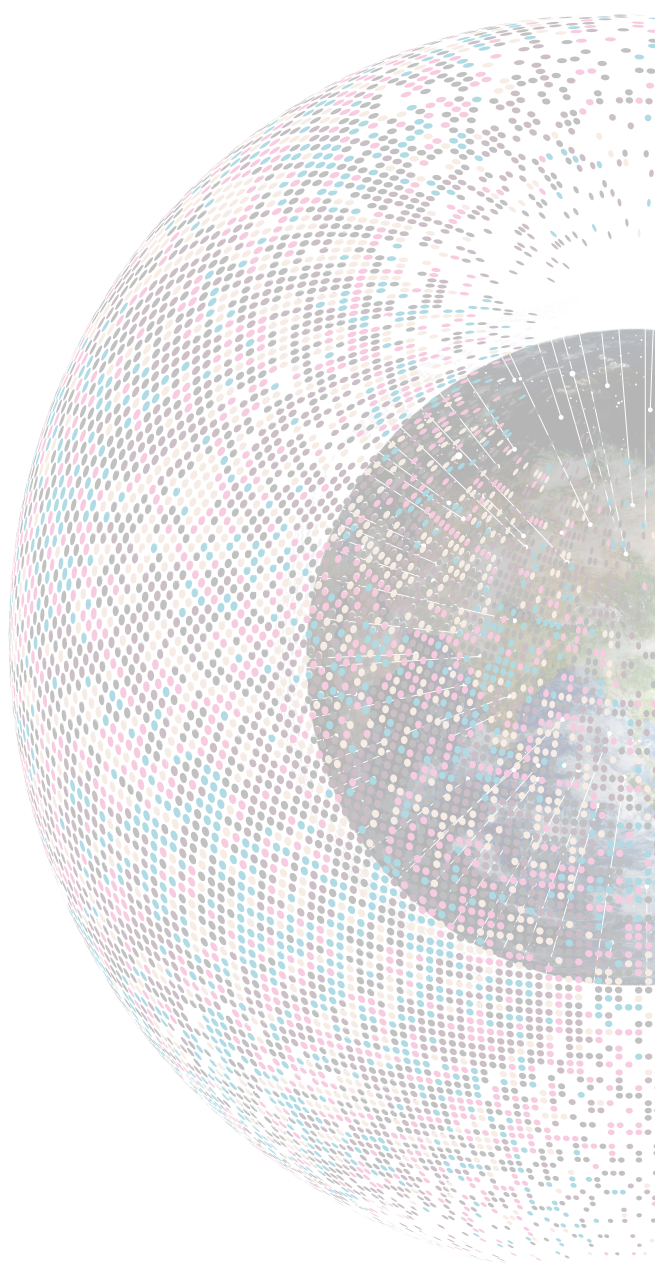
From NOW – Early-bird Registration Opens  Updated
August 20 – Abstract Submission Deadline  Extended
September 1 – Announcement of Abstract Acceptance  Extended
September 14 – Early-bird Registration Closes
September 15 – Regular Registration Opens
October 15 – Registration Deadline

VISA APPLICATION

Participants from most countries will be required to obtain a visa to enter the People's Republic of China. Please visit the website (https://ditto-summit2023.scimeeting.cn/en/web/index/17765_1439420__) for further information.

LOCAL ACCOMMODATION

The Organising Committee has reserved a number of but limited rooms at Xiamen International Conference Center Hotel, where the Summit is taking place. The rooms will be provided on a First-come-First-served basis! All registered participants are advised to book their rooms as early as possible. For more details and reservation, please visit the website (<https://ditto-summit2023.scimeeting.cn/en/web/index/>).



Co-chairs:

Prof. Fei Chai (Xiamen University)

Prof. Martin Visbeck (GEOMAR)

Contact us:

Dr. Samuel Guihua Wang (Coordination)

Ms. Xiaoyi Wang (Academic Programme)

Ms. Yiya Huang (Co-organisation)

Ms. Jingrui Zhang (Registration & Logistics)

Ms. Joana Kollert (Satellite Events)

Website: <https://ditto-summit2023.scimeeting.cn>

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Initiated by  **DITTO**

Organisers:

Fujian Ocean Innovation Center, China

State Key Laboratory of Marine Environmental Science (Xiamen University), China

Co-organisers:



Premier Sponsor: **Tencent 腾讯** |  **腾讯云**

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