



# 科学与技术前沿论坛

## 论坛日程

此次论坛为期两天。在论坛中，时间划分为四个专题的报告与讨论时间。最后半天，用于会议的总结和后续工作的讨论。会议的日程如下表所示。

2024/11/18, Monday (周一)			
08:00-08:30 (CET)	15:00-15:30 (Beijing)	<b>Opening ceremony &amp; Group photo</b> (开幕式致辞及合照)	
<b>Theme 1. AI and Twin Oceans</b> (人工智能与数字孪生海洋) Co-Chair (召集人) : Yan Du (杜岩), Pierre Tandeo			
08:30-08:50 (CET)	15:30-15:50 (Beijing)	The digital twin ocean: new advances for a wide range of user applications (20 min)	Alain Arnaud
08:50-09:10 (CET)	15:50-16:10 (Beijing)	Developing a regional digital-twin-ocean system (20 min)	Dake Chen (陈大可)
09:10-09:30 (CET)	16:10-16:30 (Beijing)	Applying deep learning for satellite altimetry mapping (20 min)	Quentin Febvre
09:30-09:50 (CET)	16:30-16:50 (Beijing)	AI applications in the reconstruction of multi-scale ocean structure (20 min)	Yan Du (杜岩)
09:50-10:10 (CET)	16:50-17:10 (Beijing)	Interpretable regression from the physics to the biogeochemistry in order to emulate regional indicators for unseen climate scenarios (20 min)	Erwan Le Roux
10:10-10:30 (CET)	17:10-17:30 (Beijing)	AI applications in oceanography (20 min)	Changming Dong (董昌明)
10:30-11:00 (CET)	17:30-18:00 (Beijing)	Discussion 讨论 (30 min)	
11:00-12:00 (CET)	18:00-19:00 (Beijing)	Break 休息/晚餐 (1 h)	
<b>Theme 2. Ocean Ecosystems and Carbon Cycle</b> (海洋生态系统与碳循环) Co-Chair (召集人) : Yuntao Zhou (周韫韬), Louis Legendre			
12:00-12:20 (CET)	19:00-19:20 (Beijing)	Research progress in carbon sink fisheries in China coastal ocean (20 min)	Qisheng Tang (唐启升)



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12:20-12:40 (CET)	19:20-19:40 (Beijing)	Negative feedbacks of the earth system to carbon dioxide removal and sequestration (20 min)	Louis Legendre
12:40-13:00 (CET)	19:40-20:00 (Beijing)	Expanding global oxygen minimum zones restrict marine habitats under climate change (20 min)	Yuntao Zhou (周韫韬)
13:00-13:20 (CET)	20:00-20:20 (Beijing)	Role of ecosystem structure in shaping carbon dynamics in the ocean (20 min)	Corrine Le Quéré
13:20-13:40 (CET)	20:20-20:40 (Beijing)	Progress of siliceous radiolarian observation in the Indo-Pacific Ocean and its application prospects (20 min)	Lanlan Zhang (张兰兰)
13:40-14:00 (CET)	20:40-21:00 (Beijing)	Outcomes and challenges of the active restoration of coastal ecosystems (20 min)	Laura Airoldi
14:00-14:30 (CET)	21:00-21:30 (Beijing)	Discussion 讨论 (20 min)	

2024/11/19, Tuesday (周二)

## Theme 3. Coastal Ocean and Sustainability of Society (近海与社会的可持续性)

Co-chair (召集人) : Qing He (何青), Anny Cazenave

08:30-08:50 (CET)	15:30-15:50 (Beijing)	Sea level rise and its impact on coastal areas (20 min)	Svetlana Jevrejeva
08:50-09:10 (CET)	15:50-16:10 (Beijing)	Big remote sensing data for costal environmental research (20 min)	Chenghu Zhou (周成虎)
09:10-09:30 (CET)	16:10-16:30 (Beijing)	Tropical Indian and Pacific interbasin interactions enhance coastal sea level variability and extreme events in recent decades (pre-recorded, 20 min)	Weiying Han
09:30-09:50 (CET)	16:30-16:50 (Beijing)	Human-driven sediment regime shift processes in turbid estuary system (20 min)	Qing He (何青)
09:50-10:10 (CET)	16:50-17:10 (Beijing)	Sea-level science in Singapore and Southeast Asia (20 min)	Benjamin P. Horton
10:10-10:30 (CET)	17:10-17:30 (Beijing)	Reducing the carbon footprint of aquaculture towards the carbon negative vision (20 min)	Hui Liu (刘慧)
10:30-11:00 (CET)	17:30-18:00 (Beijing)	Discussion 讨论 (30 min)	



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11:00-12:00 (CET)	18:00-19:00 (Beijing)	Break 休息/晚餐 (1 h)	
<b>Theme 4. Ocean Technology and Observations (海洋技术与观测)</b> Co-chair (召集人) : Xinyuan Diao (刁新源), Hervé Claustre			
12:00-12:20 (CET)	19:00-19:20 (Beijing)	Cold seep ecosystem large research infrastructure (20 min)	Si Zhang (张偲)
12:20-12:40 (CET)	19:20-19:40 (Beijing)	Enhanced BGC-Argo floats: new scientific applications and response to societal needs (20 min)	Hervé Claustre
12:40-13:00 (CET)	19:40-20:00 (Beijing)	Modular ocean trace elements sampling for the international GEOTRACES studies (20 min)	Xinyuan Diao (刁新源)
13:00-13:20 (CET)	20:00-20:20 (Beijing)	Observing particle size at global scale using Biogeochemical Argo (20 min)	Nathan Briggs
13:20-13:40 (CET)	20:20-20:40 (Beijing)	The development and application of China's marine satellites (20 min)	Mingsen Lin (林明森)
13:40-14:00 (CET)	20:40-21:00 (Beijing)	Towards autonomous observations of the ocean's carbonate pump (20 min)	Griet Neukermans
14:00-14:30 (CET)	21:00-21:30 (Beijing)	General Discussion (30 min)	
14:30-14:50 (CET)	21:30-21:50 (Beijing)	Synthetic conclusions by sessions co-chairs, and general conclusions by Jing Zhang and Paul Tréguer (20 min)	