

# Schedule

## February 28, Thursday

**12:30-13:00: Registration**

**13:00-13:10: Opening Remarks**

### **Invited Presentations (Chair: S. Kida)**

13:10-13:40: *On the stability of buoyant coastal currents: A view from the Eady model of baroclinic instability*

Shih-Nan Chen (National Taiwan Univ.), C.-J. Chen (National Taiwan Univ.)

13:40-14:10: *Spreading of the South Pacific Tropical Water and Antarctic Intermediate Water over the maritime continent*

Lei Zhou (Shanghai Jiao Tong Univ.)

### **14:10-15:00 Poster Session**

#### **Session 1: Air-Sea Interaction (Chair: A. Yamamoto)**

15:00-15:15: *Ocean response to atmospheric variability over the Indo-Pacific warm pool: a case for high vertical resolution*

Kelvin Richards (IPRC, Univ. Hawaii)

15:15-15:30: *Modeling Asian monsoon precipitation climatology: Representation of air-sea interactions over the tropical Indian Ocean*

Hariharasubramanian Annamalai (IPRC, Univ. of Hawaii), B. Taguchi (RCAST, Univ. of Tokyo), F. Hanf (IPRC, Univ. of Hawaii), J. P. McCreary (IPRC, Univ. of Hawaii)

15:30-15:45: *Kuroshio Extension and Gulf Stream's influences on the variability of near-surface baroclinicity and the associated atmospheric fields*

Bunmei Taguchi (RCAST, Univ. of Tokyo), K. Nishii (Mie Univ.), H. Nakamura (RCAST, Univ. of Tokyo)

15:45-16:00: *A metric for surface heat flux effect on horizontal SST gradients and its application to OFES*

Tomoki Tozuka (Univ. of Tokyo), S. Ohishi (ISEE, Nagoya Univ.), M. F. Cronin (PMEL, NOAA)

### **16:00-16:15 Break**

(Chair: K. Aoki)

16:15-16:30: *Scale-dependence of observed equivalent neutral wind response to ocean-mesoscale sea surface temperatures*

Niklas Schneider (IPRC, Univ. of Hawaii)

16:30-16:45: *Coupled ocean-atmosphere interaction mediated by SST and surface current: Distinctive impacts and scale dependence*

Hyodae Seo (WHOI)

## **Session 2: Model Development**

16:45-17:00: *RAHOTS: Radial basis functions Along Helix On The Sphere*

Takeshi Enomoto (DPRI, Kyoto Univ.)

17:00-17:15: *A 4D variational scheme for nearshore wave model*

Qingyang Song (ISEE, Nagoya Univ.), R. Mayerle (FTZ/CRL, CAU)

**17:15 End of First Day**

## March 1, Friday

### Session 3: Climate Variability (Chair: R. Masunaga)

9:30-9:45: *Westerly Wind Burst (WWB)/Easterly Wind Surge (EWS)-like stochastic forcing and the effects on ENSO prediction by the SINTEX-F system*

Takeshi Doi (APL, JAMSTEC), S. K. Behera (APL, JAMSTEC), T. Yamagata (APL, JAMSTEC)

9:45-10:00: *Mid-latitude source of the ENSO-spread in SINTEX-F ensemble predictions*

Tomomichi Ogata (APL, JAMSTEC), T. Doi (APL, JAMSTEC), Y. Morioka (APL, JAMSTEC), S. Behera (APL, JAMSTEC)

10:00-10:15: *Analyzing atmospheric processes behind the South China sea winter cold tongue using model outputs*

Marvin Xiang Ce Seow (Univ. of Tokyo), T. Tozuka (Univ. of Tokyo), Y. Morioka (APL/JAMSTEC)

10:15-10:30: *Anatomy of the Indian Ocean Dipole using a regional ocean model*

Shoichiro Kido (Univ. of Tokyo), T. Tozuka (Univ. of Tokyo), W. Han (Univ. of Colorado Boulder)

10:30-10:45: *On the emergence of Atlantic Multidecadal SST signal: A key role of the mixed layer depth variability driven by North Atlantic Oscillation*

Ayako Yamamoto (APL, JAMSTEC), Hiroaki Tatebe (JAMSTEC), M. Nonaka (APL, JAMSTEC)

### 10:45-11:00 Coffee Break

### Session 4: Western Pacific and Marginal Seas (Chair: Q. Song)

11:00-11:15: *Sea surface temperature trend in the East China Sea during the 20th century simulated by a regional ocean model*

Yoshi N. Sasaki (Hokkaido Univ.), C. Umeda (Hokkaido Univ.)

11:15-11:30: *A north-south contrast of subsurface salinity anomalies in the northwestern Pacific from 2002-2013*

Youfang Yan (SCSIO, CAS), L. Svendsen (Univ. of Bergen, BCCR), C. Wang (SCSIO, CAS), N. Keenlyside (Univ. of Bergen, BCCR), D. Xu (SOA)

11:30-11:45: *80-member ensemble forecast of Kuroshio in JCOPE*

Kunihiro Aoki (APL, JAMSTEC), Y. Miyazawa (APL, JAMSTEC), T. Hihara (APL, JAMSTEC)

11:45-12:00: *An LETKF-based ocean reanalysis for the Asia-Oceania region using Himawari-8 SSTs and SMOS/SMAP SSS*

Shun Ohishi (ISEE, Nagoya Univ.), T. Hihara (APL, JAMSTEC), H. Aiki (ISEE, Nagoya Univ.), J. Ishizaka (ISEE, Nagoya Univ.), Y. Miyazawa (APL, JAMSTEC), M. Kachi (EORC, JAXA)

12:00-12:15: *Long-term simulation of physical and biogeochemical compartments using DREAMS2*

Haejin Kim (RIAM, Kyushu Univ.), K. Takayama (RIAM, Kyushu Univ.), N. Hirose (RIAM, Kyushu Univ.)

## **12:15-13:30 Lunch Break**

### **Session 5: Ocean Dynamics (Chair: S. Kido)**

13:30-13:45: *Seasonality in transition scale from balanced to unbalanced motions in the world ocean*

**Bo Qiu (Univ. of Hawaii)**, S. Chen (Univ. of Hawaii), P. Klein (JPL, Caltech), J. Wang (JPL, Caltech), H. Torres (JPL, Caltech), L.-L. Fu (JPL, Caltech), D. Menemenlis (JPL, Caltech)

13:45-14:00: *The life-cycle of annual waves in the Pacific Ocean as identified by a seamless diagnosis for the energy flux*

**Hidenori Aiki (ISEE, Nagoya Univ.)**, T. Shimura (Nagoya Univ.)

14:00-14:15: *Improvement and dynamics of barotropic water exchange between the Sea of Okhotsk and Pacific by tidal forcing in OGCM*

**Hung Wei Chou (ILTS, Hokkaido Univ.)**, H. Mitsudera (ILTS, Hokkaido Univ.), K. Yamazaki (ILTS, Hokkaido Univ.), H. Nishikawa (ILTS, Hokkaido Univ.)

## **14:15-14:30 Photo Session**

## **14:30-15:30 Poster Session**

### **Session 6: New Version of OFES (OFES2) (Chair: S. Ohishi)**

15:30-15:45: *An increase of the Indonesian Throughflow by internal tidal mixing in a high-resolution quasi-global ocean simulation*

**Hideharu Sasaki (APL, JAMSTEC)**, S. Kida (RIAM, Kyushu Univ.), R. Furue (APL, JAMSTEC), M. Nonaka (APL, JAMSTEC), Y. Masumoto (Univ. of Tokyo)

15:45-16:00: *Evaluation of the water mass inside Indonesian Seas from OFES2 through lagrangian analysis*

**M Riza Iskandar (Tohoku Univ.)**, T. Suga (Tohoku Univ.), H. Sasaki (APL/JAMSTEC), Y. Jia (IPRC, Univ. of Hawaii), K. Richards (IPRC, Univ. of Hawaii)

16:00-16:15: *The fate of surface freshwater entering the Indonesian Seas*

**Shinichiro Kida (RIAM, Kyushu Univ.)**, K. Richards (IPRC, Univ. of Hawaii), H. Sasaki (APL, JAMSTEC)

16:15-16:30: *Revisiting the generation mechanism of Benguela Niños using OFES2 output*

**Ingo Richter (APL, JAMSTEC)**

16:30-16:45: *Wind-driven and intrinsic interannual-to-decadal variability in the Kuroshio Extension*

**Masami Nonaka (APL, JAMSTEC)**, H. Sasaki (APL, JAMSTEC), B. Taguchi (RCAST Univ. of Tokyo), N. Schneider (IPRC, Univ. of Hawaii)

## **16:45-17:00 Closing Remarks**

## **17:00 Adjourn**

## Poster Presentations

*Impacts of temperature measurements from sea turtles on seasonal prediction around the Arafura Sea*

**Takeshi Doi** (APL, JAMSTEC), A. Storto (CMRE), T. Fukuoka (AORI, Univ. of Tokyo), H. Suganuma (ELNA), K. Sato (AORI, Univ. of Tokyo)

*How deterministic are the deep zonal jets?*

**Ryo Furue** (APL, JAMSTEC), M. Nonaka (APL, JAMSTEC), H. Sasaki (APL, JAMSTEC)

*Effects of suspended sediment matter by high riverine discharge on surface river plume and vertical estuary circulation: a simulation study for the Tango Bay, Japan*

**Yasuhiro Hoshihara** (AORI, Univ. of Tokyo), Y. Matsumura (AORI, Univ. of Tokyo), H. Hasumi (AORI, Univ. of Tokyo), S. Itoh (AORI, Univ. of Tokyo), S. Nakada (NIES)

*Generation mechanisms of the Benguela Niño with a focus on local amplification*

**Ryo Kobayashi** (Univ. of Tokyo), T. Tozuka (Univ. of Tokyo)

*Experimental Seasonal Climate Prediction using CFES —Preliminary Results—*

**Nobumasa Komori** (APL, JAMSTEC), B. Taguchi (RCAST, Univ. of Tokyo), A. Kuwano-Yoshida (DPRI, Kyoto Univ.), T. Doi (APL, JAMSTEC), M. Nonaka (APL, JAMSTEC)

*Verification for subsurface oceanic structure in OFES outputs driven by different wind data sets (NCEP/NCAR and QSCAT) in the tropical Pacific Ocean*

Hiroshige Fukunaga (Tokai Univ.), **Kunio Kutsuwada** (Tokai Univ., \*presenter), A. Kakiuchi (Tokai Univ.), H. Sasaki (APL, JAMSTEC), Y. Sasaki (RCGC, JAMSTEC)

*The life-cycle of annual waves in the Indian Ocean as identified by a seamless diagnosis for the energy flux*

**Zimeng Li** (Nagoya Univ.), H. Aiki (ISEE, Nagoya Univ.)

*Subtropical mode water (STMW) in meso- and submeso-scale model*

Fuli Yuan (Zhejiang Univ. Zhoushan), **Cong Liu** (Zhejiang Univ. Zhoushan, \*presenter), P. Li (Zhejiang Univ. Zhoushan), H. Sasaki (APL/JAMSTEC)

*Estimation of ocean thermal energy potential in the Aguni Basin*

**Tianran Liu** (RIAM, Kyushu Univ.), B. Wang (RIAM, Kyushu Univ.), N. Hirose (RIAM, Kyushu Univ.)

*Seasonality and regional characteristics of sea-surface wind responses to mesoscale SST features*

**Ryusuke Masunaga** (IPRC, Univ. of Hawaii), N. Schneider (IPRC, Univ. of Hawaii)

*Generation and dissipation of meso-scale eddies in the southern Indian ocean*

**Takuro Matsuta** (Univ. of Tokyo), Y. Masumoto (Univ. of Tokyo)

*Role of river discharges from the Kamchatka Peninsula in the Okhotsk Sea*

**Toru Miyama** (APL, JAMSTEC), H. Misudera (ILTS, Hokkaido Univ.)

*Mechanisms of reemergence in the North Pacific revealed by mixed layer heat budget analysis*

**Kazumichi Murata (Univ. of Tokyo)**, S. Kido (Univ. of Tokyo), T. Tozuka (Univ. of Tokyo)

*Salinity frontogenesis/frontolysis in the northeastern subtropical Pacific region*

**Shun Ohishi (ISEE, Nagoya Univ.)**, S. Katsura (AORI, Univ. of Tokyo), H. Aiki (ISEE, Nagoya Univ.)

*A new framework for near-surface wind convergence over the Kuroshio Extension and Gulf Stream in wintertime: The role of atmospheric fronts*

Rhys Parfitt (Florida State Univ.), **Hyodae Seo (WHOI, \*presenter)**

*Seasonal energy analysis for baroclinic waves in equatorial Atlantic through a diagnostic scheme for energy flux*

**Qingyang Song (ISEE, Nagoya Univ.)**, H. Aiki (ISEE, Nagoya Univ.)

*Effect of altimeter data assimilation on the ecosystem distributions of the DREAMS2*

**Katsumi Takayama (RIAM, Kyushu Univ.)**, N. Hirose (RIAM, Kyushu Univ.)

*An interior pathway of Fukushima tracer across the KE*

Ella Cedarholm (Univ. of New Hampshire), I. Rypina (WHOI), A. Macdonald (WHOI), **Sachiko Yoshida (WHOI, \*presenter)**