

# UW-TU:AOS-Planning Workshop 2018-Spring April 23(M) and 24(T), 2018

@Roberts Hall #321 (April 23(M))  
@eScience PAB-6<sup>th</sup> floor (April 24(T))  
University of Washington  
Seattle, WA 98195

## Attendance:

**Tohoku University:** Shigeru Obayashi, Tomonaga Okabe, Takashi Tokumasu, Hidemasa Takana, Gota Kikukawa, Taku Nonomura, Takeru Okada and Anna Suzuki

**University of Washington:** [Randall LeVeque](#), [Christine Luscombe](#), [Xiaosong Li](#), [Tony Waas](#), [Luna Huang](#), [Peter Pauzauskie](#), [Jim Pfaendtner](#), [Bruce Hinds](#), [Stu Adler](#), [Nathan Kutz](#), [Steven Brunton](#), [Linda Leven](#), [Yuhang Yang](#), and [Fumio Ohuchi](#)

## April 23 (M) in Roberts #321

- 9:00am AOS activity report since Nov 2017. (Ohuchi)
- 9:10am Round table introduction and brief report of individual activity (All Tohoku participants)
- 10:00am Welcome remark by MSE Chair, Jihui Yang.
- 10:30am **Session (1):** [Tokumasu](#), [Hinds](#), [Adler](#), [Stu Adler](#) (Ohuchi, Okabe and Obayashi as observers). Research area: Fuel cell, active membranes, simulations, transport
- 11:30am **Session (2):** [Okada](#), [Pauzauskie](#), Ohuchi (Okabe and Obayashi as observers), Research area: Power generation from moving water droplet on graphene
- 12:30 Lunch (UW Club)
- 1:30pm **Session (3):** [Suzuki](#), [Waas](#), [Leben](#), [LeVeque](#), (Ohuchi, Okabe and Obayashi as observers), Research area: Fluid motions around fissured rock mass, simulations, etc
- 2:30pm **Session (4):** [Kikukawa](#), [Luscombe](#), [Li](#), [Huang](#), Okabe and Ohuchi (Obayashi as an observer), Research area: Multiphysical computational approach for structure optimization of the homo- and block polymer solution

- 3:30pm Break
- 4:30pm **Session (5): Takana**, Kikugawa, Pfaendtner, Ohuchi and Yuhang Yang (Ohuchi's student) (Okabe and Obayashi as observers),  
Research area: Ionic liquids for CO<sub>2</sub> adsorption, SOM analysis of Ionic liquids, MD simulations
- 6:00pm Dinner (TBD)

**April 24 (T) in eScience (PAB building 6<sup>th</sup> floor)**

9:00am eScience tour

9:30am Lightning talks

**From Tohoku:**

Obayashi (~15 min): Aiming for Fluid Informatics

Okabe (~8 min): Clustering approach for multidisciplinary optimum design  
of cross-linked polymer for the aerospace application

Kikukawa (~8 min): Clustering approach for liquid substances based  
on unsupervised learning

Others (2 page PPT) (~10min)

**From Washington:**

Randy LeVeque, Applied Math

Nather Kutz, Applied Math

Steven Brunton, Applied Math

Magda Balazinska, Director

Sarah Stone and Micaela Parker, Executive Directors

David Beck, Prof of Chemical Engineering, Director of Research

Jake Vanderplas, Senior Data Scientist, Director of Open Software

Rob Fatland, Director of Cloud and Data Solutions

Anthony Arendt, Senior Research Scientist

Steve Brunton, Asst. Prof. of Mechanical Engineering

Marina Meila, Prof. of Statistics

Youngjin Choe, Asst. Prof. of Industrial Engineering

10:30am Discussion

12:00 Lunch

2:00pm **Session (6): Nonomura**, Kutz, Brunton (Ohuchi, Okabe and Obayashi as observers), Research area: Visualization of fluid flow  
**(in Lewis #118)**