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

@Roberts Hall #321 (April 23(M))
@eScience PAB-6th 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 <u>Roberts #321</u>

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 **<u>Session (1)</u>: Tokumasu**, Hinds, Adler, Stu Adler (Ohuchi, Okabe and Obayashi as observers). Research area: Fuel cell, active membranes, simulations, transport

11:30am **<u>Session (2)</u>: 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 **<u>Session (3)</u>: Suzuki**, Waas, Leben, LeVeque, (Ohuchi, Okabe and Obayashi as observers), Research area: Fluid motions around fissured rock mass, simulations, etc

2:30pm **<u>Session (4)</u>: 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 **<u>Session (5)</u>: Takana**, Kikugawa, Pfaendtner, Ohuchi and Yuhang Yang (Ohuchi's student) (Okabe and Obayashi as observers), Research area: Ionic liquids for CO_2 adsorption, SOM analysis of Ionic liquids, MD simulations

6:00pm Dinner (TBD)

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

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)