Biocomplexity Institute Semi-Annual Research Meeting Fall 2023, October 19 & 20

Day 1 AGENDA (Recorded)

Date: Thursday, October 19, 2023

Time: 12:30 p.m. – 7:00 p.m.

Registration: 12:30 p.m. – 1:00 p.m. Program: 1:00 p.m. – 6:00 p.m. Reception: 6:00 p.m. – 7:00 p.m.

Format: Hybrid

Event Location: Kimpton The Forum Hotel

540 Massie Road, Charlottesville, VA 22903. 434-365-2590

Program Room: Grove Ballroom III (1st Floor) **Prefunction Location:** *Grove III Prefunction, Level 1*

Prefunction Grove III (far end-straight ahead). Logistic Team Members will guide all guests.



Light Refreshments, Registration

12:30 pm – 1:00 pm

Grove III Prefunction, Level 1

Please sign our guestbook and pick up your nametag.

DAY 1 AGENDA (Recorded)

Grove Ballroom III, Level 1

1:00 pm - 1:10 pm

Welcome and Overview of the Day
Lona Doyle, Academic Program Coordinator (MC)
Biocomplexity Institute, University of Virginia

Remarks, Introduction of Keynote

<u>Madhav Marathe</u>, Division Director of Network Systems Science and Advanced Computing (NSSAC) Distinguished Professor in Biocomplexity, Biocomplexity Institute

Professor of Computer Science, School of Engineering and Applied Science, University of Virginia

1:10 pm - 2:00 pm

Keynote Speaker: Ken Ono

STEM Advisor to the Provost, and Marvin Rosenblum Professor of Mathematics at the University of Virginia

Talk Title: My inspired journey through the web of mathematics

2:00 pm - 2:10 pm

Introduction Movie Clip 1: Simulation Science & the Understanding of Large Socio-Technical Systems Lona Doyle

2:10 pm - 2:15 pm

Break

2:15 pm - 2:45 pm

Remarks by Chris Barrett

Executive Director

Distinguished Professor in Biocomplexity, Biocomplexity Institute

Professor of Computer Science, School of Engineering and Applied Science, University of Virginia

2:45 pm - 3:30 pm

Remarks by Special Guests

Dr. Jim Bohland (Zoom)

Professor Emeritus at Virginia Tech, Former Vice President and Executive Director, National Capital Region Operations

Dr. Bruno Sobral

Professor of Biostatistics & Informatics, Colorado School of Public Health, Professor of Microbiology, Colorado State University, and a core faculty member in the School of Global Environmental Sustainability at Colorado State University

Dr. Reinhard Laubenbacher

Professor, Department of Medicine, Division of Pulmonary, Critical Care, and Sleep Medicine, Director, Laboratory for Systems Medicine, University of Florida

Dr. Gabriel Istrate (Zoom)

Professor, Faculty of Mathematics and Computer Science, University of Bucharest

Dr. Dirk Helbing (Zoom)

Professor of Computational Social Science, Department of Humanities, Social and Political Sciences at ETH Zurich, an affiliate of the Computer Science Department, and member of the Complexity Science Hub Vienna

3:30 pm - 4:00 pm

Remarks by Biocomplexity Institute Leadership:

<u>Stephen Eubank</u>, Professor, Biocomplexity Institute, Professor of Public Health Sciences, School of Medicine, University of Virginia.

Stephanie Shipp, Acting Division Director, Social and Decision Analytics (SDAD)

Research Professor, Biocomplexity Institute, University of Virginia

Christian Reidys, Division Director, Mathematical Biocomplexity, Biocomplexity Institute

Professor of Mathematics, College of Arts and Sciences, University of Virginia

Madhav Marathe, Division Director, Network Systems Science and Advanced Computing (NSSAC)

Distinguished Professor in Biocomplexity, Biocomplexity Institute

Professor of Computer Science, School of Engineering and Applied Science

4:00 pm - 4:15 pm

Break

Grove III Prefunction, Level 1

4:15 pm - 4:30 pm

Welcome Back/Introduce Movie Clip 2: TRANSIMS

Lona Doyle

4:30 pm - 5:00 pm

Remarks by Chris Barrett

5:00 pm - 5:45 pm

Remarks by Special Guests

Dr. Irene Eckstrand

Consultant on Training and Research Programs, Former Program Officer, National Institute of General Medical Sciences, NIH

Dr. Richard Beckman (Zoom)

Former group leader, statistics group, Los Alamos National Laboratory

Dr. Craig Benson (Zoom)

Wisconsin Distinguished Professor Emeritus, University of Wisconsin-Madison

Dean of Engineering Emeritus, University of Virginia

Professor Emeritus, Civil and Environmental Engineering, School of Engineering and Applied Science, University of Virginia

Dr. Keith Bissett (Zoom)

Senior Software Engineer at Apple

Dr. Bryan Lewis

Research Associate Professor, Biocomplexity Institute, University of Virginia

Dr. Achla Marathe

Professor, Biocomplexity Institute, Professor of Public Health Sciences, School of Medicine, University of Virginia

Dr. Henning Mortveit

Associate Professor, Biocomplexity Institute, Associate Professor of Engineering Systems and Environment, School of Engineering and Applied Science, University of Virginia

Dr. Anil Vullikanti

Professor, Biocomplexity Institute, Professor of Computer Science, School of Engineering and Applied Science, University of Virginia

5:45 pm - 6:00 pm

Closing Remarks
Madhav Marathe/Chris Barrett

6:00 pm - 7:00 pm

Reception *Terrace*

Grove III Prefunction, Level 1 (if bad weather)

Day 2 AGENDA (Recorded)

TCIV Conference Room, 1st Floor

Date: Friday, October 20, 2023

Time: 9:30 a.m. - 3:00 p.m.

Format: In-Person

Location: NorthFork-UVA Discovery Park,

994 Research Park Blvd./TCIV, First Floor Conference Room.

9:30 am - 10:00 am

Registration, Light Refreshments

Please pick up your nametags. We will also give you your table number for group discussions to be held after lunch.

10:00 am - 10:05 am

Welcome Lona Doyle

10:05 am - 10:30 am

Remarks by Chris Barrett

Chris Barrett

10:30 am -11:00 am

Future Thematic Lines

Stephanie Shipp, Acting Division Director, Social and Decision Analytics (SDAD)

Research Professor, Biocomplexity Institute, University of Virginia

Christian Reidys, Division Director, Mathematical Biocomplexity, Biocomplexity Institute

Professor of Mathematics, College of Arts and Sciences, University of Virginia

Madhav Marathe, Division Director, Network Systems Science and Advanced Computing (NSSAC)

Distinguished Professor in Biocomplexity, Biocomplexity Institute

Professor of Computer Science, School of Engineering and Applied Science

11:00 am – 12:00 pm (includes Q&A)

Keynote Speaker: Andrés Clarens

Professor, Civil and Environmental Engineering and Associate Director, UVA Environmental Institute,

University of Virginia

Talk Title: The Biocomplexity of Deep Decarbonization.

12:00 pm - 1:00 pm

Lunch (Buffet Style)

1:00 pm - 2:00 pm

Facilitated Small Group Discussions (5 min) Explanation of the session from the program committee (55 min) 10 tables discussing 5 topics (2 tables per topic)

2:00 pm - 2:15 pm

Coffee Break

2:15 pm - 2:45 pm

Discussion Summaries Facilitators/Postdocs Summarize Findings

2:45 pm - 3:00 pm

Closing Remarks Lona Doyle