PURDUE SYSTEMS COLLABORATORY

Summit registration
(by April 25, 2024)

Abstract submission
(by April 19, 2024)

Purdue Systems Collaboratory Summit 2024.

Date: **April 29, 2024**
Location: **Stewart Center, STEW 214 & 218. Purdue University (West Lafayette, IN).**
Grant Street Parking Garage

Registration deadline: **April 25, 2024. Link to register**
Abstract deadline: **April 19, 2024. Link to submit abstract** (includes abstract formatting guidelines)
Abstracts will be considered for the Poster Session and for a Lightning Talk.

Time	Event	Presenter(s)	Location
8.00am – 8.30am	**Registration / Breakfast**		**STEW 218**
8.30am – 8.45am	**Welcome / Introduction to Purdue Systems Collaboratory Summit**	**Dr. Joaquín Goñi** Program Chair of Summit, Associate Professor of School of IE/BME and PSC member **Dr. Young-Jun Son** Interim Director Purdue Systems Collaboratory, James J. Solberg Head and Ransburg Professor, School of Industrial Engineering	**STEW 214**
Session on Complex Systems. **Session Chair: Dr. Jason Reinhardt** National Security Analyst for Sandia National Laboratories			
8.45am – 9.15am	***Panel session: It's a Complex World***	**Dr. Tugba Karabiyik** Purdue Systems Collaboratory **Dr. Chad Laux** Purdue Polytechnic Institute	**STEW 214**
9.15am – 9.45am	***Your Career is a Complex System***	**Steve Records** Executive Director INCOSE	**STEW 214**
9.45am – 10.10am	***Wearable Devices and Health Outcomes***	**Dr. Jaroslaw Harezlak** Dept. of Epidemiology and Biostatistics Indiana University	**STEW 214**
10.10am – 10.20am	**Coffee break**		**STEW 218**
10.20am - 10.30am	**Panel Session on the role of Purdue Systems Collaboratory tackling Global Challenges** **Introduction by Dr. Arvind Raman** John A. Edwardson Dean of the College of Engineering, Robert V. Adams Professor in Mechanical Engineering, Professor of Materials Engineering		**STEW 214**
10.30am – 11.10am	**Dr. Stacey Connaughton** Director of the Purdue Policy Research Institute **Dr. William Crossley** Uhrig & Vournas Head of Aeronautics and Astronautics		**STEW 214**

	Dr. Priyanka Brunese Director of Research Development. John Martinson Honors College.		
11.10am – 11.20am	**Coffee break**		**STEW 218**
11.20am – 11.30am	*Lightning Talk:* ***Next-generation drug manufacturing and distribution systems***	**Giulia Murbach de Oliveira** Dept. of Chemistry Purdue Systems Collaboratory Systems Fellow	**STEW 214**
11.30am – 11.40am	*Lightning Talk.*	Selected from Abstract submission	**STEW 214**
11.40am – 11.50am	*Lightning Talk.*	Selected from Abstract submission	**STEW 214**
11.50am – 12.00pm	**Announcement of 2024 System Fellows Awardees**	**Catherine Burkhart** Senior Program Manager Purdue Systems Collaboratory	**STEW 214**
12.00pm – 1.00pm	**Lunch**		**STEW 218**
1.00pm – 2.00pm	**Poster Session**	**Poster Boards available all day for posters**	**STEW 218**
Session on AI and Networks **Session Chairs:** **Dr. Sébastien Hélie,** Director of the Center for Brain, Behavior, and NeuroRehabilitation **Dr. Joaquín Goñi,** Head of the CONN*plexity* Lab. Purdue IE/BME			
2.00 pm – 2.30 pm	***"AI @ limits of learning" Exploring the evolution of AI algorithms and future challenges***	**Dr. Eugenio Culurciello** Director of the Purdue Institute of Physical AI	**STEW 214**
2.30pm – 3.00pm	***Learning on Higher Order Networks***	**Dr. Nitesh Chawla** Director of the Lucy Family Institute for Data & Society University of Notre Dame	**STEW 214**
3.00pm – 3.30pm	***Redundancy in the Structure and Dynamics of Complex Networks***	**Dr. Luis Rocha** Systems Science and Industrial Engineering Dept. State University of New York at Binghamton	**STEW 214**
3.30 pm – 4.30pm	**Round Tables Session** **(One table per topic)** **(Coffee available)**	Each Topic has assigned Leader(s) ready for engaging discussions. See topics below.	**STEW 218**
4.30pm – 5.00pm	**Closing Remarks**	**Summary from each Topic Leader and Q&A**	**STEW 214**
5.00pm – 5.30pm	**Early Dinner / Snacks**		**STEW 218**

Topics for Round Tables Session

Table 1. Systems Thinking in Interdisciplinary Education (Dr. Tugba Karabiyik, Dr. Luis Rocha)
Table 2. Applications of Systems Thinking and Systems Dynamics (Dr. Patrick Brunese)
Table 3. Soft- / Human- / Socio-Technical Systems (Dr. Priyanka Brunese, Dr. Yuehwern Yih)
Table 4. Purdue Institute of physical AI and learning in the real world. (Dr. Eugenio Culurciello)
Table 5. Conflict Risk and Cyber Risk. (Dr. Jason Reinhardt)
Table 6. Machine Learning/Artificial Intelligence and Statistics. (Dr. Jaroslaw Harezlak)