

ALAN HARTMAN RETIREMENT SEMINAR

MONDAY, OCTOBER 4TH ZOOM MEETING

17:00 – 17:05: Welcome: Professor Tsvi Kuflik

17:05 – 17:10: Opening: Professor Alan Hartman

17:10 – 17:20: Professor Irit Hadar

17:20 – 18:00: Professor Avi Wigderson: Points, Lines and Computational Complexity

18:05 – **18:45:** Professor Richard Paige: The Evolution of the Epsilon Model Management Platform

18:50 – 19:30: Dr. Jim Spohrer: Future of AI and Post-Pandemic Society: A Service Science Perspective

19:30 – 19:55: Faculty members

19:55 – 20:00: Closing: Alan

17:20 - 18:00

Professor Avi Wigderson, <u>School of Mathematics</u>, Institute for Advanced Study, Princeton. Title: Points, Lines and Computational Complexity.

Abstract: I will talk about some results at the intersection of the research interests of Alan and myself. As it happens, results from combinatorial geometry and design theory can be extremely useful in computational complexity theory. I will state (and even prove) some old and new theorems on point-line configurations, and show how they help resolve some questions in coding theory and arithmetic complexity theory.

Bio: Avi Wigderson is an Israeli mathematician and computer scientist. He is the Herbert H. Maass Professor in the school of mathematics at the Institute for Advanced Study in Princeton, New Jersey. His research interests include complexity theory, parallel algorithms, graph theory, cryptography, distributed computing, and neural networks. Professor Wigderson received the Abel Prize in 2021 for his work in theoretical computer science.

18:05 - 18:45

Professor Richard Paige, Director, McMaster Centre for Software Certification, Associate Chair (Research), Department of Computing and Software, McMaster University.

Title: The Evolution of the Epsilon Model Management Platform Abstract: I will give a short overview of the evolution of the Epsilon platform for model management and Model-Driven Engineering, starting from its origins within the MODELWARE project, to its deployment in a variety of industrial settings today. As part of this journey I will touch on the connections between Epsilon's open-source origins and the world of proprietary tools, and links with machine learning and natural language processing. Bio: Richard Paige is the Joseph Ip Distinguished Engineering Professor at McMaster University, Hamilton, Canada, where he also directs the Centre for Software Certification. Previously he held the Chair of Enterprise Systems at the University of York, UK. He has published over 300 papers on software and systems engineering, with a particular focus on Model-Driven Engineering. He is on the editorial boards of Springer's Software and Systems Modelling, and the Journal of Object Technology, and he is vice chair of the ACM/IEEE MoDELS Conference's steering committee. He had the privilege of working with Alan Hartman in the MODELWARE and MODELPLEX European projects.

18:50 - 19:30

Dr. Jim Spohrer, Director, Cognitive Opentech Group (COG), IBM Research – Almaden.

Title: Future of AI and Post-Pandemic Society: A Service Science Perspective Abstract: The 2020-2021 pandemic is accelerating the digital (information technologies) transformation of society, including online working, learning, playing and belonging. The future of AI will bring even greater acceleration and transformations. Service science predicts that in this transformation of business and society that competing for collaborators will increasingly shape outcomes. A decade-based (2020-2080) view of IT, AI, society, and service science is provided. Bio: Jim Spohrer was most recently director of IBM's open source Artificial Intelligence developer ecosystem effort. He led IBM Global University Programs, co-founded Almaden Service Research, and was CTO Venture Capital Group. After his MIT BS in Physics, he developed speech recognition systems at Verbex (Exxon) before receiving his Yale PhD in Computer Science/AI. In the 1990's, he attained Apple Computers' Distinguished Engineer Scientist and Technologist role for next generation learning platforms. With over ninety publications and nine patents, he received the AMA ServSIG Christopher Lovelock Career Contributions to the Service Discipline, Gummesson Service Research award, Vargo and Lusch Service-Dominant Logic award, Daniel Berg Service Systems award, and a PICMET Fellow for advancing service science.