

# **INDUSTRY CLUB**

Newsletter #8 May 2023

industryclub.control.lth.se



## Automatic Control Industry Club

Exploring, Expanding and Applying Control Technology

The Industry Club is the ecosystem around the Department of Automatic Control at Lund University. The Industry Club is a forum for sharing ideas and getting feedback on the research we do. We reach out to you, the industry and organizations to initiate and collaborate on new projects and research. The Industry Club interface is this recurring newsletter, our webpage, and online and live events.

We welcome you to be a part of this!

### Highlights from the Department



• New Distinguished Guest Professor - Frank Allgöwer has been appointed as a WASP Distinguished Guest Professor and will spend much of the next two years at the department of Automatic Control. Professor Allgöwer is director of the Institute for Systems Theory and Automatic Control at the University of Stuttgart. His research focus lies in the development of new, high-performance methods of system and control theory and non-linear, networked, predictive and data-based control. Application areas of his research include process control from the point of view of process engineering, mechatronics, biomedical technology and nanotechnology.

Welcome Frank!



• New Adjunct Professor – Magnus Fontes has been appointed as an adjunct professor funded by ELLIIT. Magnus Fontes has a PhD in Mathematics, and is an expert in bioinformatics, machine learning and mathematical & statistical modeling. Application areas of his research are the analysis and visualization of complex biomedical systems, with an emphasis on cancer treatment. He is a co-founder of the bioinformatics software company Qlucore found at <u>qlucore.com</u>. He is currently Scientific Manager for Roche in Paris.

Welcome Magnus!

• It is our sad duty to inform you that our beloved friend and colleague Professor Anders Robertsson passed away on Friday April 14 after a long struggle against cancer. A memorial assembly was arranged at LTH on April 28.

Anders will be remembered by many people, all over the world, as a distinctive individual; first and foremost an exceptional human being, kind and generous, a spiritual person of integrity and uncompromising values; a talented teacher and great mentor to his numerous students and researchers; a supportive and stimulating colleague; a beautiful mind and an exceptional researcher; and, above all, a true friend.

• *Back to the M-house* - The department has left the Chemistry building after three years and has come a long way towards starting an operation in newly renovated premises in the M-building. Large parts of the robotics lab are still packed away awaiting transport.



Mika, Martin, Julia and Monica in our new kitchen.

• *Annual Report 2022* – The full annual report from the Department of Automatic Control can be found on our homepage or <u>read the pdf here</u>.

### **Upcoming Opportunities**

• New Dissertations – On June 9<sup>th</sup>, Nils Vreman will defend his PhD thesis "Analysis of Embedded Controllers Subject to Computational Overruns". Nils advisor is Martina Maggio with Anton Cervin (and later Karl-Erik Årzén) as co-advisor. The opponent is Samarjit Chakraborty from University of North Carolina and the thesis committee consists of Rolf Ernst, TU Braunschweig, Frank Allgöwer, University of Stuttgart and Claire Pagetti, ONERA. The defense will take place at 10:00 in E:A in the Ebuilding of LTH. It will be broadcast on zoom: <u>lu-se.zoom.us/j/61376737784</u>

• The strategic research area ELLIIT on IT, mobile communication and digitalization will arrange two focus periods the coming year. The ELLIIT focus periods unites high-level international researchers and young researchers for 5 weeks, to work on a common research topic. In the middle of the period a three-day workshop is held.

The focus period on Network Dynamics and Control September 4 – October 6 is in Linköping.

Between October 23rd and November 24th a focus period on 6G --- "6G – forming a better future" --- will be held in Lund. The focus period takes a broad perspective on the possibilities and limitations of technology available and what services and applications can be provided by a future 6G system. Topics range from communication theory and fundamental limits via practical implementations to novel services and applications. On November 8-10 we will have a 3-day symposium, with several invited top-level researchers.

During Spring 2024 ELLIIT will also organize a focus period on "Security and Fault Tolerance of Cyber-Physical Systems" in Lund. The responsible person for this is Martina Maggio.

• ELLIIT Annual workshop, 7-8 March 2024 in Lund.

• WASP Industry Days 2023. November 6th – 7<sup>th</sup>, Västerås:

wasp-sweden.org/event/wasp-industry-days-2023

• AI Lund upcoming:

Humans, Interactions and AI? 23 August 2023 09:30 to 15:30, fika to fika workshop in Lund and online. https://www.ai.lu.se/2023-08-23

Regulating High Risk AI in EU. 26 September 2023 9.30 to 16.00, fika to fika workshop in Lund and online. <u>https://www.ai.lu.se/2023-09-26</u>

Natural and Artificial Cognition at Lund University, 24 October 9.30 to 15.30, fika to fika workshop in Lund and online.

• Industry Club Day 8<sup>th</sup> of June at 15:00 – Welcome to meet us back in the M-building. Let's talk research, Large Language Models, Brain Computer Interfaces, Master Thesis opportunities and have a walk through the new robot lab, Ångström, Teknodromen and X-Lab. Email to sign up!

#### Contact

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