



WASP

WALLENBERG AI,
AUTONOMOUS SYSTEMS
AND SOFTWARE PROGRAM



Conference Program January 12th

- **9:00 Introduction**

Sara Mazur, Chair of the WASP Board

- **Director's update**

Anders Ynnerman, WASP Director

- **News & Updates**

Chair: Anders Ynnerman

- Co-directors
- WARA
- WASP PhD Council
- Alumni of the Year Award

- **Break**

- **10:40 NESTs**

Chair: Karl-Erik Årzén

- **LUNCH**

- **12:20 Newly recruited faculty**

Chair: Amy Loutfi

- **13:10 WASP Diversity and Inclusion Group Lecture**

Chair: Ivica Crnkovic, Chalmers

- *Ericka Johnson, LiU: Implicit bias in practices in technology research and overcoming them*

- **Break**

- **14:00 ISAB: Perspectives on WASP**

Bart de Moor, KU Leuven

- **15:00 Concluding remarks**

Anders Ynnerman & WASP Co-directors

WASP

Vision

Excellent research and competence in artificial intelligence, autonomous systems and software for the benefit of Swedish industry.

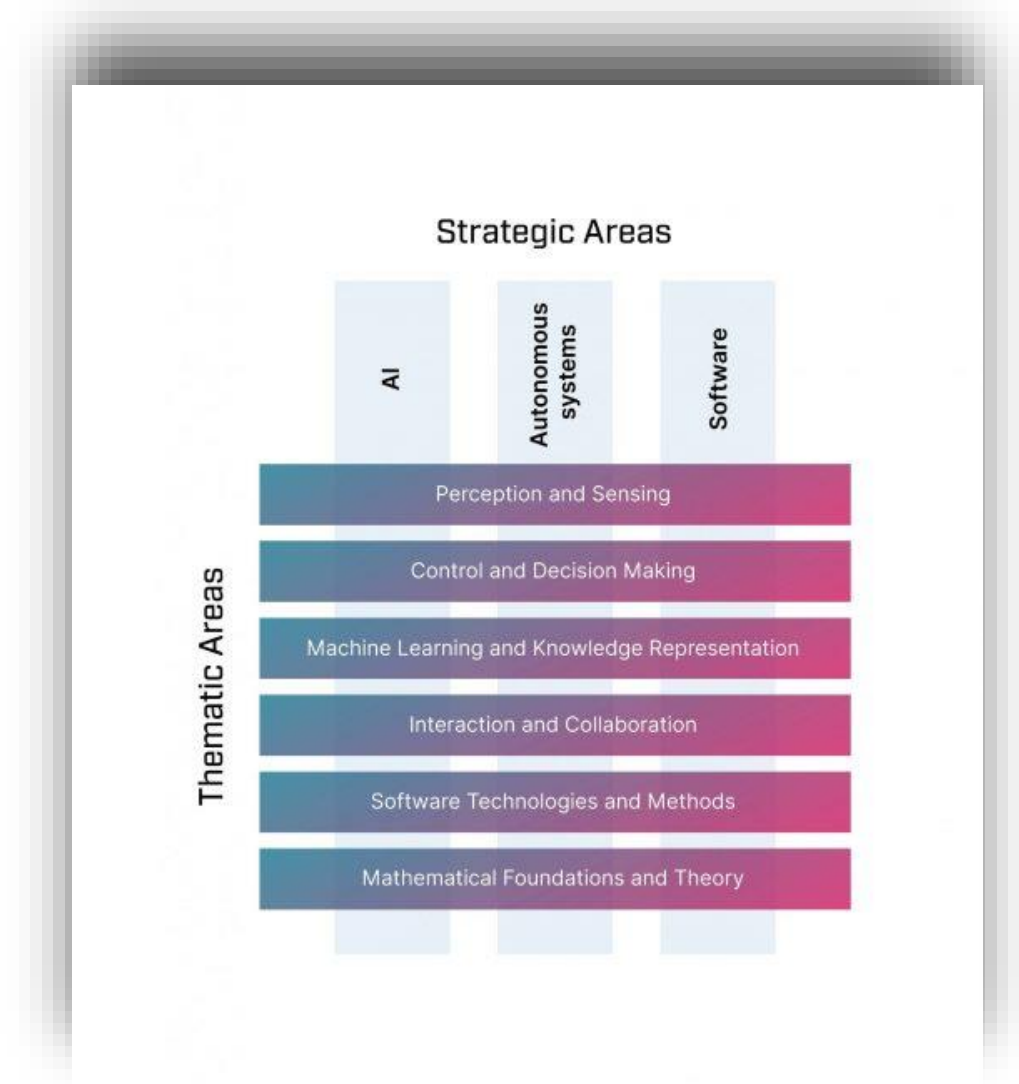
Mission

Build a world leading platform for academic research that interacts with leading companies in Sweden to develop knowledge and competence for the future.



WASP

- 5.5 billion SEK for 15 years till 2030
 - Knut and Alice Wallenberg foundation 4.2 billion SEK, Universities/ Industry 1.3 billion SEK
- New Target Goals:
 - 600 PhDs
 - 80 new research groups
 - Recruitment of leading international researchers



WASP 2030 - Narrative and Strategy

- **Vision Mission Status**
- **Situation Analysis and Outlook**
- **WASP Wanted Positions 2029**
- **Current WASP Instruments**
- **Strategy Instrument Analysis**
- **Proposed New Instruments and Initiatives**
- **WASP Beyond 2030**



WASP Instruments

RESEARCH PROGRAM

GRADUATE SCHOOL

RECRUITMENT

RESEARCH ARENAS

INTERNATIONALIZATION

COMMUNICATION EVENTS NETWORKING



WASP Status 2021

- Recruitment of 11 professors in autonomous systems and software.
- Top-level recruitment of Wallenberg Chairs, now nine in total (4 guest professors)
- Recruitment of assistant/associate professors in AI, now 26 in total
- Growth of Graduate School, now with 364 active PhDs students, 104 industrial PhD students. (33 have defended)
- 58 companies engaged in WASP





Highlights 2021

Unified Graduate School

*The mission of the WASP Graduate School is to educate PhDs with skills in **strategically important disciplines** within WASP, together with a **broad knowledge of AI, autonomous systems and software development**.*

- Educate 600+ PhDs (incl. 150+ industrial PhDs)
- Unique courses in AI, autonomous systems, software and mathematics for AI
- International study trips, summer schools, and semester abroad
- Networking with fellow students, academic researchers globally, and Swedish industry

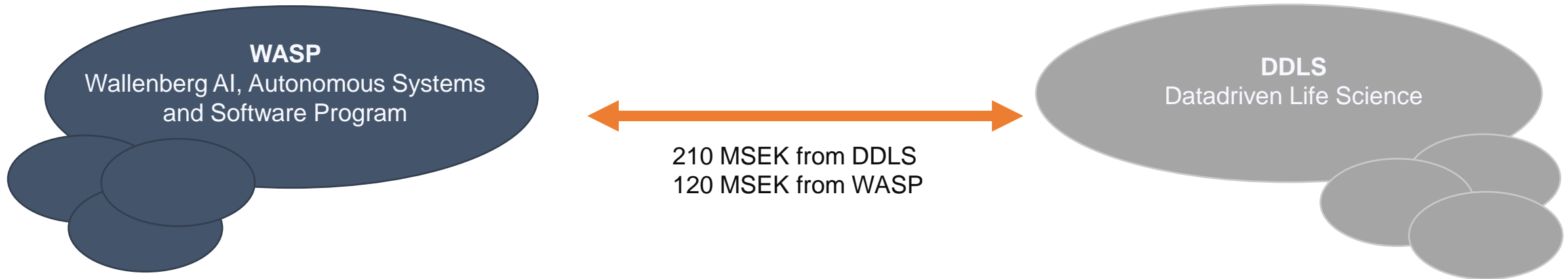


WASP NESTs 2021

- A new instrument that will encourage:
 - Novelty
 - Excellence
 - Synergy
 - Teams
- 9 NESTs awarded on Oct. 27th
 - Involves the leading scientists in the WASP domain in Sweden
 - Span across the core disciplines
 - Strong focus on AI/ML
 - Project start April 1st 2022



Collaboration WASP- DDLS



- First Call for Collaboration Projects Closed Sept 1st
 - Received 72 applications
 - PIs at all academic levels
 - 15 Projects granted

Wallenberg Research Arenas- WARA

WASP Research Arenas aim to increase the value and relevance of research by strengthening and promoting collaboration between WASP researchers and industry partners.

Scenarios

Public Safety
Saab

Robotics
ABB

Technology

Common
Ericsson Research Data Center

Media&Language
Umeå University and SEB

Software
Lund University

INTERNATIONALIZATION 2021

The WASP program is situated in an internationally fast-moving area and the international dimension is inherent in the program.

- WASP International Postdoc Program
- MoU with Aalto University for twinning of postdocs and other exchanges
- New postdoc initiative with MIT



Berzelius - AI Resource

- ATOS - NVIDIA SuperPod
- 300 MSEK
- 60 DGX A100 systems
- 8 A100 GPUs/node
- 5 PetaFLOPS/node
- 1800 Gb/s interconnect
- Hosted by the National Supercomputer Centre (NSC) and integrated in the HPC environment for compute and storage solutions



Diversity and Inclusion Group (DIG)

Diversity and Inclusion Group

WASP Diversity and Inclusion Group was formed in 2021 with the purpose to increase the gender balance and to improve diversity in WASP. The group includes both members from the WASP community and external experts.

Goals

- Build up a WASP culture of inclusiveness
- Improve WASP practices in the diversity, inclusiveness and gender equality
- Make WASP a role model for diversity inclusion and gender equality



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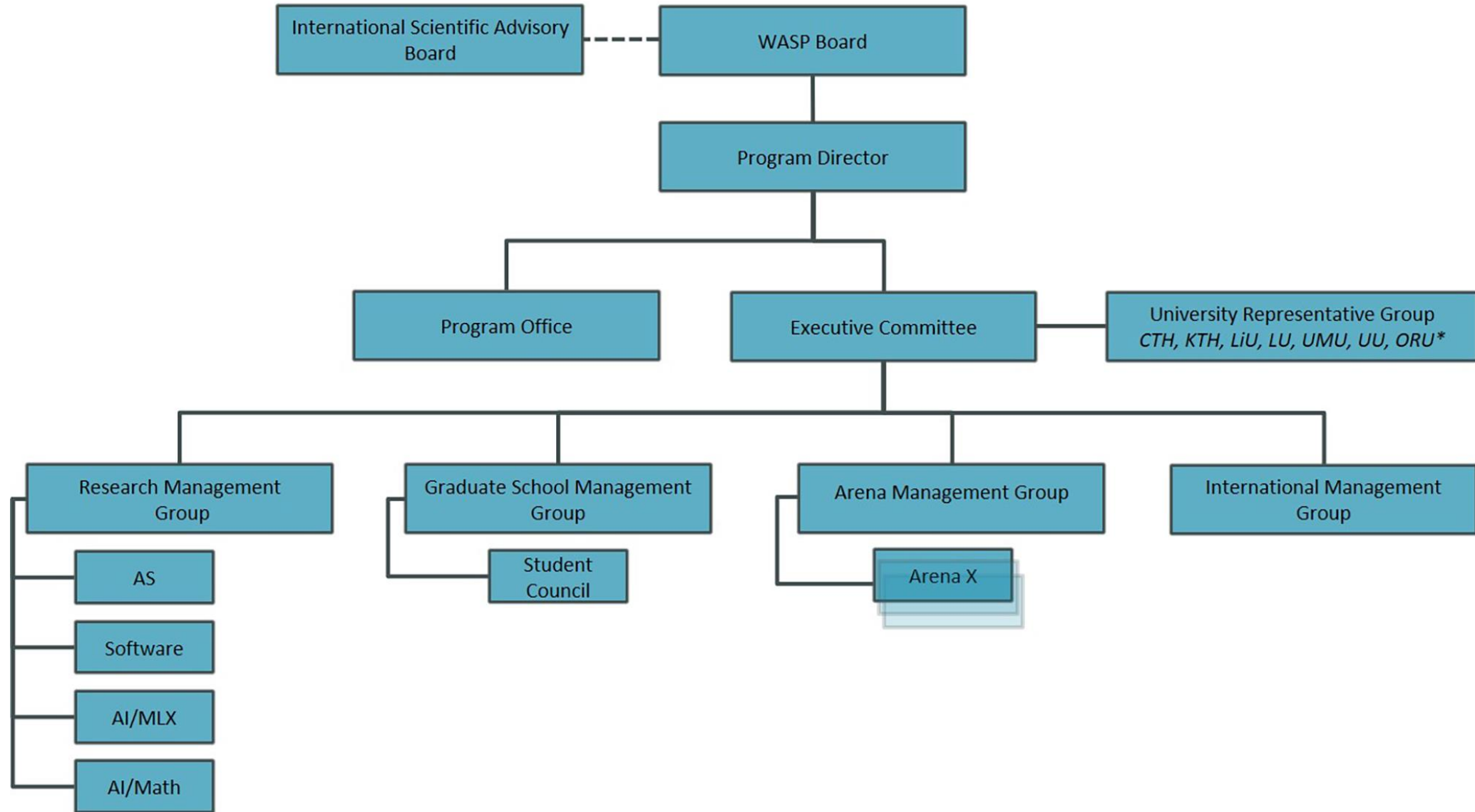
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WASP Distinguished Guest Professors

- Two top researchers as guest professors each year
- All WASP areas
- Gender balanced nominations by universities
- Flexibility regarding periods of visits and other boundary conditions
- First nomination round closes Feb. 1st



WASP Governance Structure



* Chalmers University of Technology, KTH Royal Institute of Technology, Linköping University, Lund University, Umeå University, Uppsala University, Örebro University



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