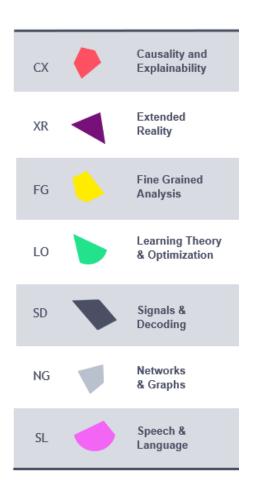## Research

Several high-impact projects by P1 co-leads and their teams capture the emerging character of P1 research at the intersection of our seven fundamental research directions (collaboratories) and ten areas of societal impact.

- CX Working to discover conditions under which the causal coefficient becomes identifiable from the observed distribution.
- XR Working on mid-air haptic stimulation to enrich user experience during human-computer interaction.
- FG Tackling the task of stylizing video objects in an intuitive and semantic manner following a user-specified text prompt.
- LO Building sample-efficient agents that generalize out-of-distribution (OOD) in real-world settings.
- SD Exploring Radio Frequency (RF)-sensing potential to become a universal sensing mechanism with a wide range of applications.
- NG Data studies to examine how consumer-grade wearable device data can increase our understanding of how environment and behaviour affect sleep.
- SL Investigating whether self-attention in large-scale pre-trained language models is as predictive of human eye fixation patterns during task-reading as classical cognitive models of human attention.

CX		Causality and Explainability
XR		Extended Reality
FG		Fine Grained Analysis
LO		Learning Theory & Optimization
SD		Signals & Decoding
NG		Networks & Graphs
SL		Speech & Language

Building Commnity

Talks, meet-ups, workshops, and PhD courses organized by centre members brought together the research communities in Denmark.

National Advisory Board

P1's National Advisory Board (NAB) was constituted in the fall, consisting of 25 domain experts outside of the universities who can advise researchers, exchange ideas, and elicit new perspectives through mentorship of PhD students.

Staffing

Professor Roberta Sinatra (UCPH/ITU) started as a new Co-Lead for the Networks and Graphs collaboratory.

New staff joining P1 directly on the grant funding include 11 PhD students and 4 postdocs identified through international searches. Rounding out the secretariat, the P1 Compute Coordinator and P1 Innovation Coordinator started at DTU in the spring, and a centre secretary was bought onboard in the fall.

More than 150 researchers became officially affiliated with the centre in 2022.