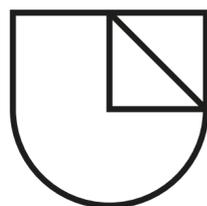




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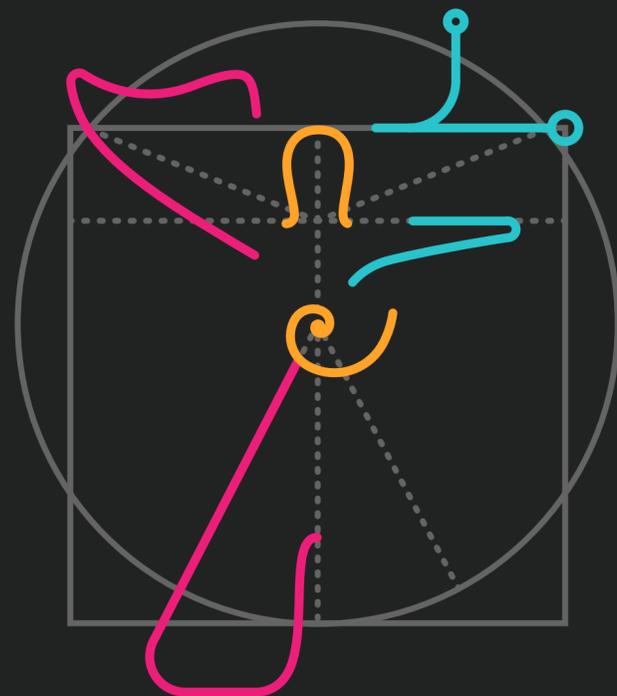
DIPARTIMENTO DI ECCELLENZA MIUR  
(L. 232 DEL 1/12/2016)



Advanced  
Design Unit



UNIVERSITÀ DEGLI STUDI  
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# FUTURE DESIGN HUMAN BODY INTERACTION

Interacting with the body: new design scenarios



# KEY DATES

**16/05/2021**

**Closing of the application**

**22/06/2021**

**Symposium online**

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## PROPOSERS

We are a community of academics, researchers, and experts concerned with project cultures and their continuous innovation. We operate through Teaching, in the Ph.D. program, through Research, and in Third Mission.

## OBJECTIVES

New technologies are creating new skills and new behaviours in which new processes take shape to profoundly renew the design concepts for the body.

## METHODOLOGY

The International Future Design Symposia aim to integrate knowledge, models, and networks from the macro to the micro and collect use cases and best practices for the development of models of anticipation and innovation.

## HOW TO PARTECIPATE

Reporting case studies and best practices, in a word, projects that starting from the micro can speak to the macro.



# REASONS AND OBJECTIVES OF THE RESEARCH

*Interacting with the body: new design scenarios*

The pervasive diffusion of enabling technologies is creating an unprecedented awareness that takes shape through processes and practices of deep manipulation of our bodies – ancient and contemporary – through design.

# A NEW REFERENCE MODEL

*Design and innovation  
in the relationship between:  
man and machine,  
individual and collectivity,  
limits and new design scenarios.*

HUMAN-SCALE  
AUTOMATION

INDIVIDUAL

TRANSFORMATION OF THE LIMITS  
BETWEEN MAN AND MACHINE

AUTOMATION  
Humans helped  
by machines

HETEROMATION  
Humans helps  
machines

INDIVIDUAL AND COMMUNITY  
IN A DATA-CENTRIC MODEL  
OF SOCIETY

COMMUNITY

INDIVIDUAL AND COMMUNITY  
IN A MODEL OF TRANSPARENT  
AND PARTICIPATED SOCIETY



# RESEARCH AREAS

Innovating in body design means opening up new paths for innovation and actively involving those who investigate and design. The result is likely to be a combined reflection on several aspects in which three main attitudes of man are articulated: the creation and construction (homo Faber), the aspiration and the incessant search for well-being (homo Saluber), and the knowledge of and with his own body in interaction with others and the environment (homo Cogitans).

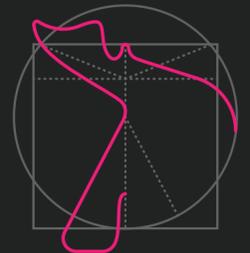
**Three anthropologies in particular that outline a broad and articulated field of investigation, creating three areas to open a debate on design and the human body:**

## Area 1

Human tools and interfaces for creating and working.

## Homo faber

Man and his constructive action



## Area 2

Artefacts of the body to enhance the well-being of the individual.

## Homo saluber

Man in a system of well-being

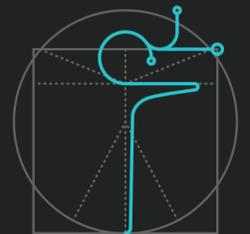


## Area 3

Data, predictions to adjust, adapt and transform one's behaviour.

## Homo cogitans

Man between interpretation and prediction







# HOMO FABER

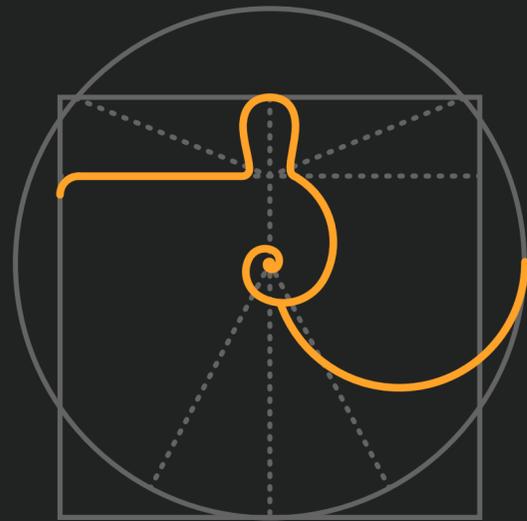
## MAN AND HIS CONSTRUCTIVE ACTION

The reflection on the design of artifacts and interfaces has involved the human body since the beginning. The body is the distinctive feature of a harmonious workspace, in which to find rules of balance and efficiency. This is the great project of ergonomics: the aspiration to protect the body and promote efficiency and effectiveness in the execution of actions. Technologies, especially digital ones, have followed the same path, coming to dictate the pace of ergonomic design. Ergonomics has become usability; interfaces are screens of mediations between man and technology. The relationship between body and product is becoming dematerialized, losing the gestural nature of the physical relationship and the awareness of the action, but giving the experience of "doing" to a process of interaction in charge of the machine. This thematic corridor wants to explore this new relationship with the construction of products, bringing out new systems and case studies for the development of new experiences of the relationship between man, machine, and object.

*Are new production tools changing the way humans and machines interact?*

*Desktop work tools are becoming more connected to a Cloud dimension by becoming more remote and interconnected, will the ways these devices interact and interface change?*

*Will wearable devices become new devices to help improve human actions in production processes?*



# HOMO SALUBER

## MAN IN A SYSTEM OF WELLBEIGN

**Keyword:** *Wellbeing, Health, Biofeedback, Behaviour change, Wearable things, Medical devices.*



# HOMO SALUBER

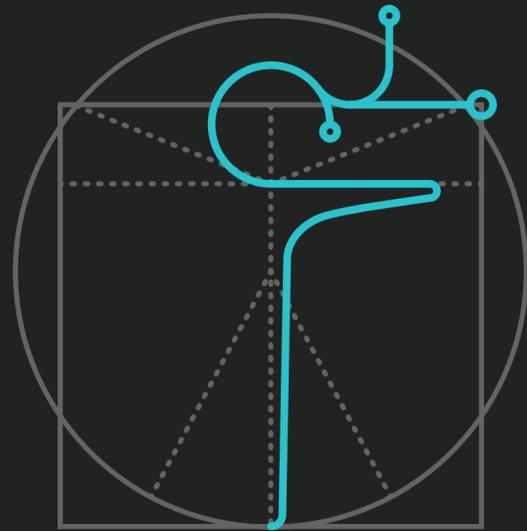
## MAN IN A SYSTEM OF WELLBEING

In the continuous aspiration of man to improve his own wellbeing, a design field emerges that has grown along two dimensions: one linked to places and environments, the other to objects and tools. The areas of reference are transversal to the medical sciences, food, and sports in which more contemporary studies renew an awareness for a long time underestimated: the wellbeing grows in relation to the balance between mind and body. The model that emerges is based on three main pillars: psyche, diet and movement. The individual becomes the center of a process of self-knowledge that changes and transforms his body in the direction of a renewed balance. The debate we wish to open in this thematic corridor focuses on the design of tools and services in which these three components of the human sphere act functionally towards the wellbeing of the individual.

*What tools can meet the need for a search for wellbeing based on psyche, diet and movement? How can they be calibrated to the physiological differences of the human being?*

*How can quantification processes be used to increase awareness of one's own body during daily, sporting, rehabilitation and work activities?*

*How to design devices that act on human behaviour in a positive way and without diverting human focus from core activities?*



# HOMO COGITANS

## MAN BETWEEN INTERPRETATION AND PREDICTION

**Keyword:** Self-tracking, data visualization, predictive, artificial intelligent, information hierarchy

# HOMO COGITANS

## MAN BETWEEN INTERPRETATION AND PREDICTION

The role of data and its use pose new issues and challenges for mankind. The evolution of technologies is allowing us an increasingly precise knowledge of our bodies and our behaviour; we live with tools that monitor, facilitate access, and allow us to know what is happening in depth, and what will happen with reasonable accuracy. Technologies and neuroscience are further increasing the semantic richness of this data. The aim of this thematic corridor is to open up a reflection that brings to light projects and prototypes that highlight the experiential dimension of the predictive processes and personal and social change that the use of data entails, is entailing and will entail in the future.

*What role will data play in human-centered design?*

*How can Quantified Self processes contribute to a real knowledge of one's own body to develop processes of change?*

*Can the interaction between Data Visualization and Artificial Intelligence contribute to developing new knowledge tools?*

*How can anticipation processes dialogue with the experience of everyday life?*

*With what design tools is it possible to address the combination of efficiency and freedom of action for the individual and the community?*

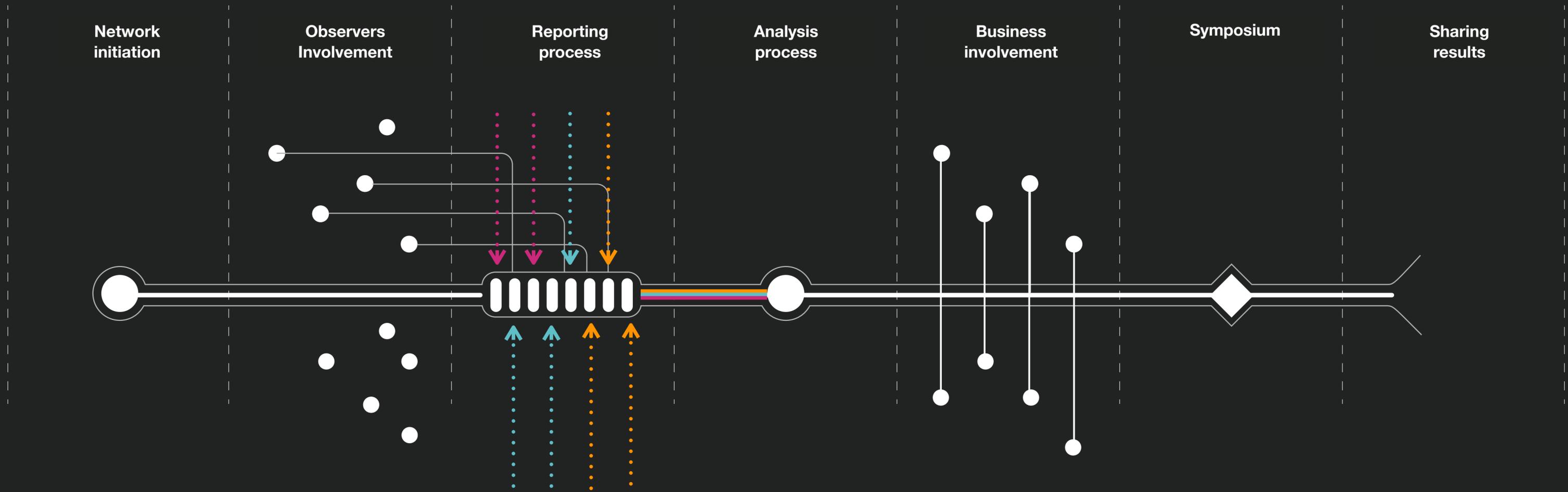


# METHODOLOGY

Advanced Design Unit has consolidated the Future Design framework as a methodological basis to develop, through a network of international observers, a process of research and anticipation in the field of design science studies. This approach to scientific research first pioneered in 2017 and refined in subsequent years, aims to integrate knowledge, models and networks from the micro to the macro and collect use cases and best practices; projects, which start from the micro but speak to the macro.



# SYMPOSIUM STAGES





# PROPONENTS

**Flaviano Celaschi**

Full professor | University of Bologna | Advanced Design Unit

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**Roberto Montanari**

Extraordinary professor | University of Study Suor Orsola Benincasa | RE:Lab

**Andreas Sicklinger**

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**Michele Zannoni**

Associate professor | University of Bologna | Advanced Design Unit



# THE CALL

The Symposium will be an opportunity to confront in a "hybrid" and multidirectional way to some questions on the relationship between man-machine evolution.

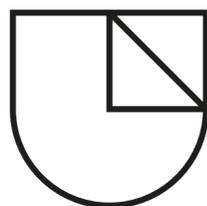
An international call will be opened in preparation for the event through a survey with the aim of:

- build a network of observers with expertise in the symposium's subject area;
- conduct a census, catalog, map out and interpret the significant cases related to this phenomenon;
- gather together scholars and active witnesses, who are conducting experiments all around the world, to exchange insights;
- put in action this exchange to hold a collective reflection on the theme starting from the Symposium.



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# WHO WE ARE

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**Citizen Sciences and practices for social innovation:** we are interested in understanding and deepening how design cultures and practices can influence open innovation with particular reference to the effects on the ways of inhabiting cities and territory.

**Design and Communication for Systemic and Responsible Innovation:** we are convinced that every human act is observed in terms of sustainability, involves places other than the one in which it happens, and develops immediate, short term, and long term consequences.

**Design Innovation in Collective Learning System:** we are driven by the belief that the central and most strategic resource of organisations is knowledge. We are interested in designing innovative content on which to activate knowledge processes but also in rethinking the processes, spaces, and tools through which knowledge is transformed into value.

**Human Body Design in Economy of Transformativeness:** we have always practiced intentionally modify the world through the intentional modification of our mental and physical form and capabilities. This intentionality means to design and we are interested in understanding the relationship between contemporary cultures of design and organic matter.