FOR PLANT INTELLIGENCE – WORKSHOP AND PANEL

https://meshfestival.ch/pages/diskurs/en | https://plants-intelligence.ch/

Hosted by Yvonne Volkart & Team Plants_Intelligence

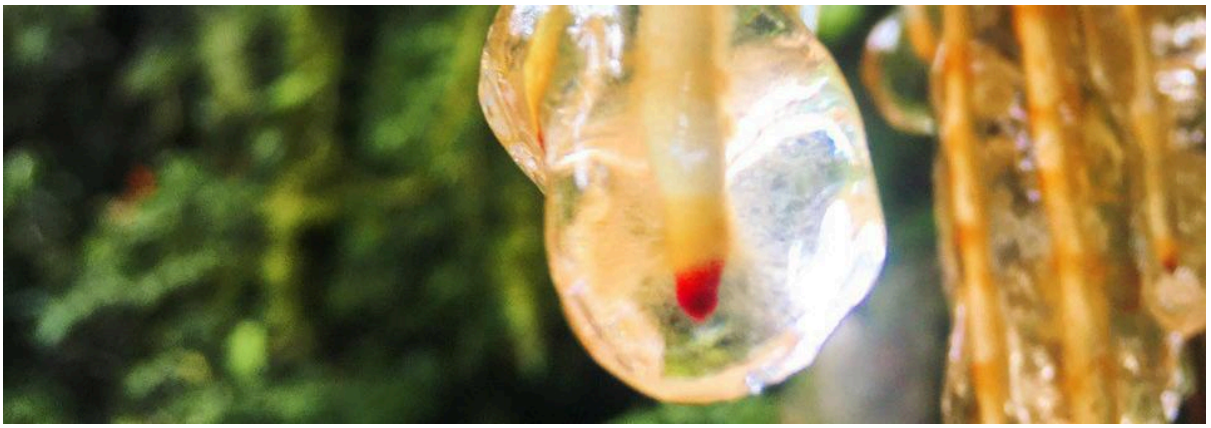
The current hype around AI—which is basically just resource-intensive computing based on data mining and brute force—makes us forget that there are completely different, much more "efficient" and pleasurable forms of intelligence: forms that are open to the multiplicity of being on earth, that create relations and playful forms of cross-species alliances. Plants in particular, these disregarded creatures, surprise us with their ingenious capacities to interact with their ecologies. This panel focuses on the question of how plants sense and compute, decide and act. What does that mean? What can humans learn from it? And why is this relevant for art, technology, science and society?

The workshop **For Plants Intelligence** takes place from **18-19 October 2024** at Basel Academy of Art and Design FHNW and Meshfestival. We envision formats that are dialogic, playful and hopefully undermine traditional forms of representation. We ask our invited contributors to share their research, to present examples and to talk about challenges and difficulties. The goal is that we take time, listen to each other, and work on affinities and differences in the interdisciplinary field of plant intelligence and plants' ways of worlding. The event will unfold into non-public parts at the HGK and a public panel at Meshfestival and includes the sharing of food, tea ceremonies, moments of visiting the festival, but also rest and hopefully vegetal engagement and fun.

Panel **For Plant Intelligence** at Mesh (HGK - D1.04 Aula) on **Friday, 18 October, 6 pm**
Introduction by Yvonne Volkart, IAGN, followed by a keynote "Focus on plants: insights from time-lapse, electrophysiology and cognitive neuroscience" by Paco Calvo and an input "Bëng jouenan betiyëng yajuan jabuayenán" by Ayênan Quinchoa Juajibioy. A conversation moderated by Rasa Smite with simultaneous Spanish translation by Felipe Castelblanco concludes the panel.

While the panel is public, the workshop is on registration only. The internal workshop **For Plant Intelligence** will take place on **Friday and Saturday** at the Institute Art Gender Nature HGK Basel FHNW. Interested parties are welcome and can register at: valentina.zingg@students.fhnw.ch

IMAGE CREDIT: AYÊNAN QUINCHOA JUAJIBOY



FOR PLANT INTELLIGENCE – WORKSHOP PROGRAM

Friday, 18 October 2024 (public and on registration)

D 7.10 (conference room tower building)

10 – 12 (on registration)	Vegetal Welcome: Tea Ceremony by Ayênan Quinchoa Juajibioy Introduction by Yvonne Volkart Input “Holobiont” by Monika Messmer Followed by an open-ended discussion
12 - 13	Lunch Break
13 - 14.45 (on registration)	Presentations by Rasa Smite, Ursula Damm and Katja Tielbörger
18 (public)	Panel “For Plant Intelligence” at Mesh (HGK - D1.04 Aula) Introduction by Yvonne Volkart, IAGN Keynote “Focus on plants: insights from time-lapse, electrophysiology and cognitive neuroscience” by Paco Calvo Input “Bëng jouenan betiyëng yajuan jabuayenán” by Ayênan Quinchoa Juajibioy Followed by a conversation moderated by Rasa Smite Simultaneous Spanish Translation by Felipe Castelblanco

Saturday, 19 October 2024 (on registration)

D 5.06 (tower building)

09.30	Vegetal Welcome: Tea Ceremony by Julia Mensch
10	Presentations by Julia Mensch, Valentina Vetturi and Felipe Castelblanco
12	Wrap-up by Paco Calvo Including final discussion
13.15-13.30	Harmonization by Ayênan Quinchoa Juajibioy

ABSTRACTS KEYNOTE AND INPUT @ MESH PANEL (18 OCTOBER)

ABSTRACT PACO CALVO:

“Focus on plants: insights from time-lapse, electrophysiology and cognitive neuroscience”

In recent years, the concept of plant intelligence has gained traction, inviting us to rethink our understanding of cognition beyond the animal kingdom. This talk will explore how technologies—ranging from time-lapse photography to advanced electrophysiological recordings, and imaging techniques like MRIs and plant PET scans—can enable us to interpret the complex behaviours and “smart” doings of plants. However, with these exciting advancements comes the need for critical reflection. This talk will also address the potential pitfalls of studying plant intelligence, such as the risk of anthropomorphism—projecting human-like qualities onto plant behaviours observed under time-lapse photography—and the dangers of confirmation bias in experimental settings. By carefully considering these challenges, we can better appreciate the unique forms of perception and intelligence that plants exhibit, without forcing them into frameworks designed for humans or other animals.

ABSTRACT AYÊNAN QUINCHOA JUAJIBOY:

“Bëng jouenan betiyëng yajuan jabuayenán”

In this talk, Ayênan Quinchoa Juajibioy offers an interpretation of five words spoken in kamëntsá, his ancestral language "Bëng jouenan betiyëng yajuan jabuayenán" which means "Listen carefully to the plants that guide." This expression helps the kamëntsá people to understand how the internal and external interactions with plants manifest. They use it as a guideline to maintain a balanced connection with other human beings and the universe. This guideline also assists the deployment of communication strategies and digital content in his community, through various digital and technological tools used to help preserve life in their ancestral territory.

HOSTS & PARTICIPANTS

TEAM PLANTS_INTELLIGENCE (HOST)

Team Plants_Intelligence is Yvonne Volkart, Felipe Castelblanco, Julia Mensch and Rasa Smite. The research project “Plants_Intelligence” is funded by SNSF and hosted by IAGN HGK Basel FHNW.

DR. YVONNE VOLKART

Yvonne Volkart is PI of the SNSF-research project Plants_Intelligence. Learning Like a Plant (2022-25). She is head of research and lecturer of art theory and cultural media studies at the Institute Art Gender Nature Basel Academy of Art and Design FHNW. In 2023, her monograph “Technologies of Care. From Sensing Technologies to an Aesthetics of Attention” has been published (Zürich: diaphanes). Her concerns lie in the modes of how aesthetic theory-practice, ecology, technology, science, and decolonial feminism come together and bring us in relation to the world.
Contact: yvonne.volkart@fhnw.ch

DR. FELIPE CASTELBLANCO

Artistic Researcher and Postdoc

Felipe Castelblanco is a multidisciplinary artist, working at the intersection of participatory, film, and Media Art. His work explores institutional forms and creates platforms for inter-epistemic dialogue in unlikely spaces. Felipe has exhibited at museums and galleries internationally, including ZKM in Karlsruhe and the Royal Academy in London (UK). He has been the recipient of several international awards, including the Robert Rauschenberg Foundation Residency (USA, 2019), Starr Fellowship at the Royal Academy Schools in London (2015). In recent years, Felipe’s creative work has focused on developing avenues for biocultural peacebuilding in the Andean-Amazon foothills of Colombia by supporting diverse modes of vegetal and human cooperation, and fostering cultural diplomacy through sustained engagement with Indigenous, farmers and migrant communities and the international cultural, academic, and eco-political spheres.
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DR. RASA SMITE

Artistic Researcher

Rasa Smite is an artist and researcher working in the intersection of art, science and immersive technologies. She is co-founder of RIXC Center for New Media Culture in Riga, and a series editor of Acoustic Space publications as well as co-founder of NAIA, Naturally Artificial Intelligence Art association in Karlsruhe. Rasa holds a PhD in sociology of media and network culture. Currently she is a Professor in Liepaja University, and Researcher at Basel Academy of Art and Design FHNW, Switzerland. In her artistic practice, Rasa works together with artist Raitis Smits and scientists creating visionary and interdisciplinary artworks exploring techno-ecological perspective, human-plant communication, nature-cultures and climate topics. Their artworks have been awarded (Ars Electronica 1998, Falling Walls – Science Breakthrough 2021), and shown widely – in Venice Architecture Biennale 2018, ZKM Karlsruhe, HEK in Basel, Ars Electronica in Linz, Beijing Art and Technology Biennale, ONX Studio New York, OCADU Onsite Gallery in Toronto, and other representable venues and cultural institutions in Europe, North America and Asia.
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JULIA MENSCH

Visual Artist, Researcher and Doctoral Candidate

Julia Mensch studied at the Hito Steyer's class at the UdK, Berlin, and at the National Art University in Buenos Aires. Her practice focuses on the history of Socialism and Communism and environmental socio-political conflicts in Latin America, confronting the exploitative conditions of the land and beings since colonisation and throughout neocolonialism. She has taken part in several international residency programs and exhibitions, including Savvy Contemporary and NGBK (Berlin), Museo Nacional de Grabado (Buenos Aires), Shedhalle (Zürich), Kunsthalle Appenzell, Art Biennial Sesc_Videobrasil (São Paulo), BienalSur (Buenos Aires). Her work was supported the Senate of Berlin/DE, Pro Helvetia/CH, Amt für Kultur Appenzell Ausserrhoden/CH, Schlesinger Stiftung/CH, Sulzberg Stiftung/CH, DAAD (German Academic Exchange Service)/DE, Robert Bosch Foundation/DE, Fondo Nacional de las Artes/AR, among others.
Contact: julia.mensch@fhnw.ch

VALENTINA VETTURI

Affiliate Team Plant_Intelligence. *Mimosa Pudica* - Research project granted by Italian Council 2024

Valentina Vetturi is a visual artist working at the intersection of performance, writing, and transdisciplinary research. Based in Bari, Italy, her work explores themes such as memory, digital ecologies, and collaborative processes. She holds a Law degree, a Master's in Landscape, Art, and Architecture from the Polytechnic University of Milan (2007), and a Master's in Digital Currencies from the University of Nicosia (2019). Her practice is influenced by open-source methodologies, fostering decentralised knowledge networks that merge art with scientific inquiry. In 2024, she received a grant from the Italian Council program promoted by the Directorate-General for Contemporary Creativity of the Italian Ministry of Culture for *Mimosa Pudica*, a research on how learning with plants about their memory can inform principles of digital ecologies. Vetturi has also been awarded Fondo Cultura 2021-MIC with MA*GA Museum and collaborates with institutions like Lagos Biennial,Nigeria; MAXXI Rome; MACTE, Termoli; MAMBO Bologna; Strauhof, Zurich; Quadriennale 16/Palazzo delle Esposizioni, Rome; Fondazione Zegna,Turin; Italian Cultural Institute, Stockholm; Norrlandsoperan-BildMuseet, Umeå; Tranzit.ro, Bucharest; Swiss Institute, Rome; MACRO Museum, Rome.
https://www.valentinavetturi.com/portfolio/mimosa-pudica/

DR. PACO CALVO

Director Minimal Intelligence LAB (MINT LAB)

Paco Calvo is a renowned cognitive scientist and philosopher of biology, known for his groundbreaking research in the field of plant cognition and intelligence. He is a professor at the University of Murcia in Spain, where he leads the Minimal Intelligence Lab (MINT Lab), focusing on the study of minimal cognition in plants. Calvo’s interdisciplinary work combines insights from biology, philosophy, and cognitive science to explore the fascinating world of plant behavior, decision-making, and problem-solving. By investigating the complex interactions and adaptive responses exhibited by plants, Paco Calvo has significantly contributed to our understanding of cognition beyond the animal kingdom, challenging conventional perspectives on intelligence and mental capacities.
https://www.um.es/mintlab/

AYÊNAN QUINCHOA JUAJIBOY

Research partner

Ayenan Quinchoa Juajibioy was born in Tabanok Bëngbe Uáman Luar Tabanok (English: Our sacred place of origin). He is a member of the Kamëntšá and Inga people, located in the department of PUTUMAYO SUR DE COLOMBIA. He is a student of Materials Engineering at the University of Antioquia, and computer programming technician at CENSA (Antioquia Systems Center). He is an empirical videographer and has collaborated in the documentary films «Rio Arriba» and «AYENAN» made by Felipe Castelblanco and Lydia Zimmermann with Ñambi Rimai Media Collective. He currently works as multimedia content creator for the educational platform of the U de Colombia (University Corporation) in Medellín. Throughout his life Ayenan has been a protector of his territory and the legacy of his ancestors and parents. For millennia the Kamëntšá and Inga cultures have had an intimate contact with the magical plants of their environment, and this connection and sensitive knowledge have motivated Ayenan to shine a light on a collective process of territorial defense because the memory of his culture is being physically and culturally exterminated due to the transformations brought to them by globalization. Ayenan Quinchoa Juajibioy is the current leader of the Pan-Amazon Collective and research partner of the SNSF project “Plants_intelligence. Learning Like a Plant”.

PROF. URSULA DAMM

Research Partner. Chair for Media Environments, Faculty of Art & Design, Bauhaus University Weimar

In her ongoing artistic research “Lichens as symbiotic performance” Ursula Damm explores cryptogamic vegetation (in particular lichens) in cities. Together with Microbiologist and artist Klaus Fritze she explores their role as border crossers between the human and the plant habitat, and as symbiotic organisms. With a background in sculpture Ursula Damm began her artistic career with works made of soil as models of space and time, developed in a bodily experience. In the 1990s her installations became geometric constructions of settlement patterns. Since 1995 her installations respond interactively to architectural aspects with video tracking technology. Aside she developed numerous installations on the relationship of nature, science and civilization. Her works have been presented internationally, e.g. at Goethe House New York; Chronus Art Center Shanghai, Ars electronica or ISEA. Since 2008 she holds the chair for Media Environments at the Bauhaus University in Weimar, where she established a DIY Biolab and the Performance Platform at the Digital Bauhaus Lab.
https://ursuladamm.de

DR. MONIKA MESSMER

Research partner. Co-head of the Department of Crop Sciences (ad interim) and leader of the Plant Breeding Group at FiBL

Monika Messmer is president of the European Consortium for Organic Plant Breeding (ECO – PB www.eco-pb.org) and board member of EUCARPIA section of organic and low input agriculture and IFOAM Seeds Platform. She is engaged in several national and European projects and the scientific coordinator of the EU project LIVESEED (www.liveseed.eu). She is involved since 2011 in decentralized participatory organic cotton breeding in India (www.greencotton.org; www.sgf-cotton.org) and since July 2021 in CROPS4HD project on farmers seed systems for Consumption of Resilient Orphan Crops & Products for Healthier Diets in Africa and Asia.

PROF. DR. KATJA TIELBÖRGER

Research partner. Head of Plant Ecology / Director Botanical Garden, University Tübingen

Katja Tielbörger is a plant ecologist interested in ecological and evolutionary consequences of biotic interactions involving plants. She studies these interactions in the context of climate- and land use change, plant invasions, biodiversity loss, heavy metals, and plant learning and decision-making, via large-scale field or greenhouse experiments. Recently, she also attempts to make her research more meaningful for addressing our environmental multi-crises via transdisciplinary approaches. Her work on plant intelligence clearly does not fall into that category, but she loves it, because it demonstrates how special – and no less «intelligent» than animals – plants can be.