The Future of Moon
An habitat on the moon
1st to the 5th MARS 2021
Amphi to be communicated

Photos Eric Dufour
SCHEDULE

1st March 2021
- 9.00 to 9.30 am Arrive and get seated (coffee at home)
- 9.30 am Start
- 9.30 to 9.40 am Welcome – By Director of Faculty Architecture, Philippe Bach
- 9.40 to 10.10 am Introduction: The Systemic method in architecture / synthesis - Olivier WALTER

Workshop Challenges and Opportunities:
- 10.10 to 11.00 am Long-term prospective - Pascal BULTEL CNES
- 11.00 to 11.45 am Architecture - Jacques ROUGERIE
- 11.45 to 12.30 am Ergonomics and movements - Jeanne Morel / Paul MARLIER
- 14.00 to 14.45 pm Industry and science - Barbara IMHOF
- 14.45 to 15.30 pm Design - Phinam BAGLEY
- 15.45 to 16.30 pm ARCHES – Emmanuel DUFRAINES

2nd March 2021
- 9.30 to 10h15 am Human - Christophe CAMUS
- 10.15 to 11.45 am Biomimetics - Natasha CHAYAAMOR-HEIL
- 11.45 to 12.15 am Architecture - Sylve TRUYMAN - Thomas LAGARDE
- 14.00 to 14.30 pm WORKSHOP PREPARATION Room 505 (every tuesday) 9h00 / 17h00

5th March 2021
- 14.00 to 17.00 pm PRESENTATION

INTENTION

En ce 21e siècle, nous essayons d’atteindre à nouveau la lune et les étoiles. Mais cette fois, nous voulons nous y installer. Dans les années à venir, la course à l’espace des années 60 sera à nouveau à son maximum avec de nouveaux acteurs importants, la Chine et le privé avec Elon Musk et Jeff Bezos. Déjà, de nombreuses agences se lancent dans le design d’un habitat Lunaire en oubliant soigneusement le rôle de l’architecte. À nous de reprendre position...
**WHERE:**
The SCHOOL OF ARCHITECTURE DE PARIS VAL DE SEINE

**INTRODUCERS**

**Philippe BACH**
- Appointed Chairman of the Board of Directors of the School of Architecture of Strasbourg between 1997 and 2002.
- Director of the National School of Architecture of Strasbourg from 2003 to 2014.
- Philippe BACH becomes director of the National School of Architecture of Paris-Val de Seine in August 2014.
- He is knight in the Order of Arts and Letters.
- He is knight in the order of the Academic Palms.

**Emmanuel DUFRASNES**
- ARCHES assistant professor at ENSAS, member of AMUP research unit.
- He founded this scientific network and will coordinate it with Denis BRUNEAU (I2M) from the University of Bordeaux between 2017 and 2020.
- He has more than 10 years of experience in consulting firms in Belgium and France in the field of construction and sustainable development.
- As such, he is regularly commissioned as an expert on topics related to the construction of positive energy buildings or sustainable urban development.
- He also acts as a Research Tax Credit Expert on behalf of the Ministry of Higher Education and Research.

**MODERATORS**

**Olivier Walter**
- He began teaching at the ENSA Paris Val de Seine immediately after his diploma.
- He is a certificate "Architecture in extreme environments."
- Topics ranged from Earth to Space.
- This certificate was stopped in 2005.
- He was also a professor at Strate College on space design from 2004 to 2009.
- He is currently responsible for the ARCHES network for space.

**Patrice CECCARINI**
- Firle National Scientific Research Architectural de Val de Seine, Theories and practices of the conception architecturale et urbaine - TPCAU,
- Faculty Member
- EHESS-Ecole des hautes études en sciences sociales, CÉHITA and GANHM (Art History and Medieval Studies), Associate Member
- Université Paris 7 - Diderot, Ville Architecture et patrimoine, Associate Member
Pascal BULTEL
VLong term key trends Expert - Innovation Directorate CNES
CNES Headquarters - Paris
Prospective Groups Management - Transport & Energy
- Industrialization of space - Space Circular Economy
- Advanced Techs Experts network management
Project Manager & Reusable Launchers MRO specialist
Airbus Satall Launchers: Nov. 2015 - Sept. 2019
Les Mureaux
- Very light reusable launcher
- Project Manager
- Aeronautical MRO practices
- Adaptation to Space Vehicles
- Aeronautical Lessons Learned for highly reusable Space Vehicles and much more...

Jeanne MOREL
I am an artist, dancer, choreographer and researcher in extreme environments and in particular in micro gravity aboard the Airbus A310 Zero G. With my partner Paul MARLIER, I create immersive works generated by movement and the human brain in weightlessness. At the border between art, sport and neuroscience, I draw this work of adaptation of the body to Space with the sponsor of our project: the French astronaut Jean-François CLENOUX.

Paul MARLIER
Architect / Designer / Creative Tech / Director Extreme Temporary / Explores
Since 2016, Jeanne and I have been working in zero gravity with Jean-François CLENOUX, the engineer from NOVESPACE and the British astronaut Tim Peake in the Zero G plane piloted by astronaut Thomas PESQUET. We created ART IN SPACE in 2019.

ART IN SPACE develops sensitive experiments for territories with altered gravity in order to raise awareness and preserve our planet. With our scientific partners, we design neuro-tech tools that are useful for the planet and for long space travel. Together we are weaving an "ecological, philosophical and humanist spatial quest."

Phinem BAGLEY
Phinem turns science fiction into reality for a better future. She is a French industrial designer and space architect with 15 years of experience creating cutting-edge hardware in Welsbro, AVL, Repton Tech/Biohacking, Healthcare, Education, Sports, Transporta-
tion, and Aerospace. She specializes in turning groundbreaking technologies into attainable, intuitive, and beautiful products that help humans become the best versions of themselves.

She speaks internationally on the subject of "Design for a Better Future," covering stories of sustainability, design thinking, education, and human flourishing.

Barbara IMHOF LIQUER
We do not believe in drawing a line between Earth and Space, but rather in identifying and applying 'reciprocities' between terrestrial (Earth) and extra-terrestrial (Moon, Mars, etc.) architecture. In the way we design, produce, transport, and habitation systems for living on and off the planet. The firm takes a multidisciplinary approach to research and design of future systems. It fosters collaboration across disciplines, cultures, and national bounda-
ries. Our portfolio spans a wide variety of projects involving the design and construction of habitable and transportation systems for living, working, and exploring on Earth (1G), in orbit (0G), on the Moon (1/6G), on Mars (1/3G) and beyond.

Christophe CAMUS
Professor of Human and Social Sciences at ENSAE (Rennes), I have also been a researcher at GIPPE (EA 3465) since 2016, associate researcher at LE-LAUBEUM (ENSA Pont Le Vittelet). My research focuses on the sociology of architecture, the practices and professional identity of archi-
tects, architectural design and mediations, and finally, the visions and designs of the future of architect-
ture, a problem that led me to study the construction and housing programs and projects of the interwar period, from the 1960s to today.

Finally, I am co-responsible for the Arts and Creation Pole of the MSHB (Rennes), as well as co-responsible for the ARCHIS thematic scientific network on architectures in extreme environments.

Jacques Rougerie
visionary architect born in 1945, pursues two passions, the sea and architecture. He bases his research and the structures he builds on the principle of biornidelity, whilst taking sustainable development into account. Jacques Rougerie has built underwater habitats, laboratories, marine research centers, vessels with see-through hulls, subaqueous museums. He has designed underwater villages and structures to raise awareness on the beauty of the sea and its fun-
gional role in the great history of humanity.

He was elected in 2008 at the Institut de France - Academy of Fine Arts.

Natasha CHAYAKMOR-HEIL
architect, PhD in biomimicry strategy for design and innovation in architecture and technology MAP-MAACC 3495 CNRS. Her researches focus on the exploitation of several innovative methods and principles of nature and implement them in architectural design towards sustainable built form. She also studies how living organisms adapt to their environments and implement the principles for a sustainable built environment.

Sylvie TRUYMAN
Architecte
I founded SYL-51708 AM in 2018 a company specialized in innovations, design, and illustrations in the fields of architecture, space and industry.
Our concepts have won several international awards, last year in the USA where we exhibited at NASA’s Johnson Space Center, our Martian habitat concept (1st Mars City Design Award). Our bio-
mimetic projects won the Coup de Cœur award and the Mention Speciale, 2nd jury from the J.Rougerie Foundation at the Institut de France. Selenia, is a lunar village Inspired by underearth life.
RST ARCHES - Le réseau disruptif sur les architectures en milieux extrêmes
http://www.arches.urbicoop.eu/

Relegated for a long time to the field of building sciences, conditioning techniques – ventilation, air-conditioning, lighting, sound or odorisation systems – play a decisive role in the contemporary urban and architectural production. They are fully implemented in commercial architecture, which promotes experiential and sensory marketing. They are developed in accordance with regulations of energy efficiency in buildings that establish new requirements in terms of flux between architecture and environment. They become necessary in inhospitable climates (tropics, deserts, poles), in some constrained spaces (places of care, entertainment, conservation or specific facilities), or in extreme environments (underwater, underground or extra-terrestrial architectures). They naturally question our relation to the environment and to our living spaces, to energy and material flows, and to the visible and invisible technologies that rule our living environments.

Jean-Jacques FAVIER - astronaut

The lines of thought developed within the "ARCHES" Network concern the International Space University (ISU) by their interdisciplinarity, including the SHS that we also deal with in our space-related ecosystem. Different topics are of interest to us, such as spin-offs from the space sector to green techs, and in general the technologies from the laboratories to advance the achievements of the general public on Earth. Our partnership with the Strasbourg School of Architecture (ENSAS) made it possible to associate our partners with partners from all over the world, but also, especially in Alsace and France.

Jacques ROUGERIE - Architect

Throughout my life I gave shape to my dreams and realized them through meetings with men who believed in my vision of a prospective architecture and helped me to implement it. Without their support, many of my projects would not have been possible. Today, it is my duty to help new generations, to give them the benefit of this support that they need to build the future. This is my commitment and that of the Jacques Rougerie Foundation dedicated to space and the sea ... Because it is space and the ocean that will be born the destiny of future civilizations. I will bring my expertise to the "ARCHES" Network.

At the crossroads of architecture, technology, culture and environment, this scientific network "ARCHES" aims to eventually generate knowledge and breakthrough innovations by confronting the boundary conditions generated by extreme environments such as space and planets of the solar system, the oceans and underwater universes, the high mountain, the deserts or the ice caps of our planet, ...