

TENSINANTES  
2023

# TENSINET SYMPOSIUM 2023 at Nantes University

The TensiNet Symposium 2023 **"Membrane architecture: the seventh established building material. Designing reliable and sustainable structures for the urban environment"** will be held at Nantes University (France) from **Wednesday 7<sup>th</sup> till Friday 9<sup>th</sup> June 2023** with 3 main topics:

## Structural membrane: contemporary, innovative, adaptive daring and impactful solutions

In Jules Verne's hometown, with its focus on innovation and futuristic issues, membrane architecture can provide answers to current problems, especially for ever denser cities and for a world that is always on the move.

## Tensioned membrane structures: the seventh building material

Recent advances in the design of membrane structures, development of a Eurocode dedicated to structural membranes: the word membrane must now be part of the daily vocabulary of architects, designers and decision-makers, and the specificities of membrane design must be part of the knowledge of all structural engineers.

## Structural membrane: an answer to issues of the 21st century

Lightweight design, well-being, environmental impact, energy and acoustic performance, life cycle of materials and structures, end of life of membrane structures: these keywords are part of the current and future construction challenges and are an important message for the younger generations.

We are in contact with several keynote speakers. **Dominique Perrault Architecture** confirmed his lecture on the new foldable roof of the Suzanne Lenglen Court, on the site of the Roland Garros tournament, Paris. Enjoy the appetizer!

## The "pleating" of the Suzanne Lenglen Court

*In haute couture, pleating refers to the art of folding a piece of fabric. For a garment, this technique allows great freedom of movement with style and elegance.*



Figure 1a. Visualisation showing the foldable roof in "action" © Dominique Perrault Architecture\_RSI\_FFT\_Adagp

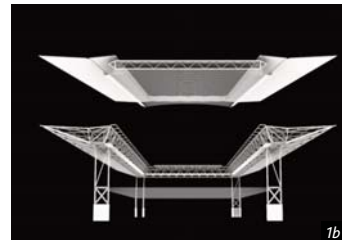


Figure 1b. Visualisation showing the structural elements © Dominique Perrault Architecture\_TESS\_Adagp

Positioned above the existing stands, with a sufficient overhang, it comprises a mobile part, made of PTFE fabric, and a fixed part that provides support for the mobile part and integrates all the

equipment necessary for its deployment and folding. The mobile cover consisting of SEFAR® Architecture TENARA® 4T40HFT stretched by cables attached to the structure will fold up on the south side by the movement of a mobile button in a horizontal movement. The simplicity of the elements used, and their repetitions create a new balance that assumes the addition of a new element without presenting anything superfluous.

[www.youtube.com/watch?v=pUvPBw5cVCQ](http://www.youtube.com/watch?v=pUvPBw5cVCQ)

## CALL FOR ABSTRACTS SYMPOSIUM 2023

Interested to participate than choose one of the three main topics and upload your abstract!

For more information see:

<https://tensinantes2023.sciencesconf.org>

Abstract submission 30<sup>th</sup> May 2022

Abstract acceptance 30<sup>th</sup> June 2022

Paper submission 31<sup>st</sup> October 2022

Paper acceptance or feedback 5<sup>th</sup> January 2023

Revised paper submission 16<sup>th</sup> February 2023

**Scientific Committee** The following members have confirmed their commitment to review abstracts and papers: Prof Adriana Angelotti (Politecnico di Milano), Ass Prof Paolo Beccarelli (University of Nottingham), Dipl Ing Arch Katja Bernert (Low and Bonar), Dr Alexis Bloch (Méca), Prof Heidrun Bögner-Balz (Hochschule für Technik Stuttgart), Dr Rabah Bouzidi (Université de Nantes), Roberto Canobbio (Canobbio Textile Engineering), Prof John Chilton (University of Nottingham), Prof Jan Cremers (Hochschule für Technik Stuttgart), Prof Lars De Laet (Vrije Universiteit Brussel), Dr Olivier Flamand (Centre Scientifique et Technique du Bâtiment), Prof Gunther Filz (Aalto University), Dr Laurent Gornet (École Centrale de Nantes), Prof Peter Gosling (Newcastle University, School of Engineering), Prof Josep Llorens (Universitat Politècnica de Catalunya), Prof Marijke Mollaert (Vrije Universiteit Brussel), Prof Arch Carol Monticelli (Politecnico di Milano), Prof Nicolas Pauli (Ecole Nationale Supérieure d'Architecture de Montpellier), Ass Prof Arno Pronk (Eindhoven University of Technology), Dr Monica Rychtáriková (KU Leuven, Belgium / STU Bratislava), Prof Franck Schoefs (Université de Nantes), Dipl Ing Bernd Stimpfle (formTL), Prof Natalie Stranghøner (Universität Duisburg-Essen), Ass Prof Martin Tamke (Royal Danish Academy), Prof Patrick Teuffel (Teuffel Engineering Consultants), Dr Jean-Christophe Thomas (Université de Nantes), Dr Ing Jörg Uhlemann, (Universität Duisburg-Essen), Adjunct Prof Salvatore Viscuso (Politecnico di Milano) and Prof Alessandra Zanelli (Politecnico di Milano).