

XXVII International Conference of the Ibero-American Society of Digital Graphics.

#in_person_conference

29 Nov - 30 Nov - 1 Dec Punta del Este | Maldonado | Uruguay

Blucher

CumInCAD









SIGraDi 2023 Accelerated Landscapes XXVII International Conference of the Ibero-American Society of Digital Graphics www.sigradi.org/sigradi2023

Edition

Fernando García Amen Facultad de Arquitectura Diseño y Urbanismo Uruguay

Ángel Armagno Gentile Facultad de Información y Comunicación Uruguay

Ana Laura Goñi Fitipaldo Centro Universitario Regional Este Uruguay

Design

Ángel Armagno Gentile Facultad de Información y Comunicación Uruguay

ISBN: 978-9915-9635-0-1

© Facultad de Arquitectura Diseño y Urbanismo (UdelaR)

This publication has undergone a peer review process prior to its dissemination.

All rights reserved. This publication may not be reproduced, in whole or in part, or stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission in writing of the publisher. The content of this book is the responsibility of the authors and does not necessarily reflect the opinion of the publishers. This publication has undergone a peer review process prior to its dissemination.



#in_person_conference

29 Nov - 30 Nov - 1 Dec Punta del Este | Maldonado | Uruguay

Blucher CuminCAD















Organization

Chairs

Fernando García Amen

Facultad de Arquitectura Diseño y Urbanismo (FADU / UdelaR), Uruguay.

Ana Laura Goñi Fitipaldo

Centro Universitario Regional Este (CURE / UdelaR), Uruguay.

Local Organizing Committee

Ángel Armagno Gentile Gabriela Barber Etelvina Borges Bonilla Raúl Buzó Gimena Elgorriaga Luis Flores Josefina Fulgueiras Sofía Gambetta Marcos "Rocco" Lafluf Raúl Leymonie Juliana Malcuori Francesca Mollica Melissa Molina Lucas Otero Paulo Pereyra Juan Pablo Portillo Alejandro Recoba Florencia Sánchez Victoria Sánchez Mariana Silveira Maite Sosa Methol

Advisory Committee

Rodrigo Martín-Iglesias

Universidad de Buenos Aires, Argentina

Frederico Braida

Universidade Federal de Juiz de Fora, Brasil

Pedro Soza

Universidad de Chile Chile

Sponsors











MundoMac





Coordinators

Alberto Fernández

Workshops Universidad de Chile, Chile

Ángel Armagno Gentile

Graphic Design Universidad de la República, Uruguay

Mariana Silveira

Webmaster SIGraDi 2023 Universidad de la República, Uruguay

David A. Torreblanca-Díaz

Communications and Social Media Universidad Pontificia Bolivariana Chile - Colombia

Pablo C. Herrera

Proceedings Advisor Universidad Peruana de Ciencias Aplicadas, Perú

Executive International Committee

Marcelo Bernal

President
Perkins & Will
Chile - United States

Silvia Patricia Hernández

Vice President Universidad Nacional de Córdoba Argentina

Rodrigo Scheeren

Treasurer Universidad Federal de Bahía Brasil

Viviana Hernáiz

Secretary MATERIAL Digital Design Studio Bolivia - United States

Leia Miotto Bruscato

Vice President of International Relations Universidad Federal do Rio Grande do Sul, Brasil

Pablo C. Herrera

Scientific Director Universidad Peruana de Ciencias Aplicadas, Perú

Mauricio Loyola

Editorial Director Universidad de Chile Chile

Alberto Fernández

Educational Director Universidad de Chile Chile

David A. Torreblanca-Díaz

Communications Director Universidad Pontificia Bolivariana Chile - Colombia

Paula Gómez Zamora

Innovation Director Georgia Institute of Technology Chile - United States

Editorial Committee

Pablo C. Herrera

Universidad Peruana de Ciencias Aplicadas, Perú

Marcelo Bernal

Perkins & Will Chile - United States

Fernando García Amen

Universidad de la República Uruguay

Paula Gómez Zamora

Georgia Institute of Technology Chile - United States

Frederico Braida

Universidade Federal de Juiz de Fora, Brasil

Silvia Patricia Hernández

Universidad Nacional de Córdoba Argentina

Rodrigo Martín-Iglesias

Universidad de Buenos Aires Argentina

Scientific Committee

Affonso Orciuoli

Universitat Internacional de Catalunya, Spain

Alberto

Fernandez Gonzalez

University College London / Universidad de Chile Chile

Alejandro Veliz Reyes

University of Plymouth United Kingdom

Alexandra Paio

Instituto Universitario de Lisboa, Portugal

Alexis Caridad Méndez González

Universidad Tecnológica de La Habana, Cuba

Alfredo Andia

Florida International University, United States

Ana Carolina

Carvalho Farias

Instituto Universitario de Lisboa, Portugal

Andrea Martínez

Universidad de Concepción, Chile

Andres Burbano

Universitat Oberta de Catalunya, Spain

Andrés Martín-Pastor

Universidad de Sevilla Spain

Andressa Martinez

Judson University United States

Angad Warang

Universitat Internacional de Catalunya, Spain

Angelica Ponzio

Universidade Federal do Rio Grande do Sul, Brazil

António Menezes Leitao

Universidade de Lisboa Portuga**l**

Armando Carlos de Pina Filho

Universidade Federal do Rio de Janeiro, Brazil

Biayna Bogosian

Florida International University, United States

Bob Martens

Technische Universität Wien, Austria

Bruno Figueiredo

University of Minho Portugal

Bruno Perelli Soto

Universidad de Chile

Byron Iram Villamil Villar Colombia

Camilo Guerrero del Río Universidad de Chile

Carlos Nome

Chile

Universidade Federal da Paraíba, Brazil

Carmen Aroztegui

Universidad de la República, Uruguay

Chien-hua Huang

China Academy of Art

Cristian Calvo Barentin

Universidad Católica de Chile, Chile

Cristóbal Alessandro **Becker Castellaro**

Universitat internacional de Catalunya, Spain

Daniel Cardoso

Universidade Federal do Ceará. Brazil

Daniel Mateus

Lisbon School of Architecture, Portugal

Daniela Silva

Instituto Universitario de Lisboa, Portugal

Torreblanca-Díaz

Universidad Pontificia Bolivariana Chile - Colombia

David Sperling Universidade de Sao Paulo, Brazil

David Viana

Portugal

Davide Lombardi

Xi Jiaotong - Liverpool University, China

Debora Verniz

University of Missouri United States

Deborah Benros

University of East London United Kingdom

Deborah Macedo Santos

Universidade Federal do Cariri, Brazil

Denise Mónaco

Universidade Estadual Paulista, Brazil

Diana Rodríguez Barros

Universidad Nacional de Mar del Plata, Argentina

Effimia Giannopoulou

Xi'an Jiaotong-Liverpool University, China

Elsie Maria Arbelaez

Universidad Pontificia Bolivariana, Colombia

Erica de Sousa Checcucci

Universidade Federal da Bahia, Brazil

Ernesto Bueno

Universidade Presbiteriana Mackenzie, Brazil

Ever Patiño

Instituto Tecnológico Metropolitano, Colombia

Fabiana Heinrich

Universidade Federal do Rio de Janeiro, Brazil

Felipe Etchegaray Heidrich

Universidade Federal de Pelotas, Brazil

Felipe Tavares

Universidade Federal da Paraiba, Brazil

Fernando García Amen

Universidad de la República, Uruguay

Fernando Lima

Belmont University **United States**

Filipa Crespo Osorio

Instituto Universitário de Lisboa, Portugal

Filipe Coutinho Quaresma

Universidade Lusofona Portugal

Frederico Braida

Federal University of Juiz de Fora, Brazil

Gabriela Bustos

Pluris XR, United States

Galo Canizares

University of Kentucky **United States**

Giancarlo Di Marco

Liverpool University China

Gisela Belluzzo de Campos

Anhembi Morumbi University, Brazil

Gonçalo Castro Henriques

Universidade Federal do Rio de Janeiro, Brazil

Grazielle Bruscato Portella

University of Lisbon Portugal

Gustavo Rincon

University of California United States

Huda Salman

Robert Gordon University United Kingdom

Hugo Mulder

University of Southern Denmark, Denmark

James Park

Montana State University United States

Jane Jacqueline Espina Bermúdez

Universidad del Zulia Venezuela

Jose Pedro Sousa

University of Porto Portugal

Joshua Vermillion

University of Nevada Las Vegas, United States

Joy Mondal

WEsearch Lab, India

Juan Carlos Guillen Salas

Universidade de Brasilia, Brazil

Juan Pablo Portillo Burghi

Universidad de la República, Uruguay

Katherine Caceres Corvalan

Dum Dum Lab, Chile

Khatereh Hadi

United States

Laline Cenci

Universidad Federal de Santa María, Brazil

Lamila Simisic Pasic

International University of Sarajevo, Bosnia and Herzegovina

Lawson Spencer

Cornell University United States

Leia Miotto Bruscato

Universidade Federal do Rio Grande do Sul, Brazil

Lucas Baisch

Universidad Estatal de Campinas, Brazil

Luciana Fornari Colombo

Universidade Federal do Rio Grande do Sul, Brazil

Luis Gustavo

Goncalves Costa Universidade de Santo Amaro, Brazil

Manoel Rodrigues Alves

Universidade de São Paulo Brazil

Marcelo Bernal

Perkins & Will United States

Marco Hemmerling

Cologne University of Applied Sciences, Germany

Marcus Vinicius Augustus Fernandes Rocha Bernardo

Universidad Federal de Bahía, Brazil

Maria Elena Tosello

Universidad Nacional del Litoral, Argentina

Mario Guidoux Gonzaga

Universidade Federal do Rio Grande do Sul, Brazil

Mauricio Loyola

Universidad de Chile Chile

Mauro Costa Couceiro

Universidad Internacional de Cataluña, Spain

Mehmet Sinan Bermek

Georgia Institute of Technology, United States

Miguel Roco

Universidad de Concepción, Chile

Monika Maria Stumpp

Universidade Federal do Rio Grande do Sul, Brazil

Natalie Groetelaars

Universidade Federal da Bahia, Brazil

Naylor Barbosa Vilas Boas

Universidade Federal do Rio de Janeiro, Brazil

Nuno Montenegro

Universidade de Lisboa, Portugal

Olavo Avalone Neto

Universidad Federal de Santa María, Brazil

Orkan Zeynel Güzelci

Istanbul Technical University, Turkey

Pablo Banda

Metapatrón Studio, Chile

Pablo Baquero

Liverpool University, China

Pablo C. Herrera

Universidad Peruana de Ciencias Aplicadas, Peru

Patricia Laura Muñoz

Universidad de Buenos Aires, Argentina

Paula Gómez Zamora

Georgia Institute of Technology Chile - <u>United States</u>

Paulo Magalhaes

Pontifícia Universidade do Rio de Janeiro, Brazil

Paulo Pereyra

Universidad de la República, Uruguay

Pedro Azambuja Varela

University of Porto Portugal

Pedro Soza

Universidad de Chile Chile

Pedro Veloso

University of Arkansas United States

Ricardo Alexandre Paiva

Universidade Federal do Cearà, Brazil

Ricardo Massena Gago

Universidade de Lisboa Portugal

Rodrigo García Alvarado

Universidad del Bío-Bío Chile

Rodrigo Martin-Iglesias

Universidad de Buenos Aires, Argentina

Rodrigo Paraizo

Universidade Federal do Rio de Janeiro, Brazil

Rodrigo Scheeren

Universidade Federal da Bahia, Brazil

Ruben Jacob-Dazarola

Universidad de Chile Chile

Sandra Catharinne

Pantaleao Resende, Brazil

Sara Boccolini

Universidad Nacional de Córdoba, Argentina

Sarvin Eshaghi

Texas Tech University United States

Sema Alaçam

Istanbul Technical University, Turkey

Sepehr Vaez Afshar

Texas Tech University United States

Sherif Abdelmohsen

American University in Cairo, Egypt

Silvia Patricia Hernandez

Universidad Nacional de Córdoba, Argentina

Simone Helena Tanoue Vizioli

Universidade de Sao Paulo, Brazil

Spyridon Ampanavos

Perkins & Will United States

Tassia Borges de Vasconsellos

Universidade Federal de Pelotas, Brazil

Thiago Leitao

Universidad Federal de Río de Janeiro, Brazil

Tomohiro Fukuda

Osaka University Japan

Tzu-Chieh Hong

University of Kansas United States

Valeria Ena

Universidade de Lisboa, Portugal

Victor Sardenberg

Leibniz Universitat Hannover, Germany

Vinicius Fulgencio

Universidade Federal de Pernambuco, Brazil

Viviana Hernaiz Diez de Medina

MATERIAL Digital Design Studio, Bolivia - United States

Wilson Florio

State University of Campinas, Brazil

Wolfgang Dokonal

Graz university of Technology, Austria

Yongheng Hu

Beijing Institute of Fashion Technology, China

Workshops

Workshop I

SymbioSphere: Crafting Post-Humanist Realities in Augmented Worlds

Ipek Kuran

University of the Aegean Lesvos, Greece

Kaan Karabağlı

İstanbul Technical University İstanbul, Turkey

Workshop II

Labor in the Age of Al

Sara Codarin

Lawrence Technological University Michigan, United States

Karl Daubmann

Lawrence Technological University Michigan, United States

Workshop III

Accelerated Imaginaries: Navigating Future Spaces with [fiction]XR

Begum Moralioglu

Istanbul Technical University Istanbul, Turkey

Leman Figen Gül

stanbul Technical University Istanbul, Turkey

Workshop IV

Programming L-Systems for generative designers

Umberto Roncoroni

Universidad peruana de Ciencias Aplicadas. Lima, Perú

Workshop V

Landscape Information Modeling for understanding Urban Drainage and Topography

Tainah Frota Carvalho

Universidade Federal do Ceará Fortaleza, Brazil

Workshop VI

Fabrication-Oriented Digital Design of Geometrically-Complex Timber Systems

Amin Adelzadeh

Augsburg Technical University of Applied Sciences. Augsburg, Germany

Workshop VII

Datamancy: The Palmistry of Morphogenesis

Clarissa Ribeiro

DeTAO Masters Academy & SIVA Shanghai, China

Roy Ascott Studio

DeTAO Masters Academy & SIVA Shanghai, China

Presentation

The global situation that emerged after the planetary uncertainty caused by the coronavirus, known as the "Great Reset", highlighted the fragile condition of certain beliefs prior to the crisis, while unblocking the acceleration vectors towards the construction of new possible futures. These are no longer interpreted as an unavoidable and singular unit, but as spaces of plurality, where the probable, the desirable and the plausible coexist. The emerging landscapes of the great reset are presented in the key of speculative fiction. They are landscapes of convergence between the physical and the digital; between the biological and the machinic; between futurizations, futurabilities and virtualities.

The XXVII SIGraDi Congress invites us to reflect on the emerging accelerated landscapes of current techno-diversity and its projection towards future technopolitics.

Preface

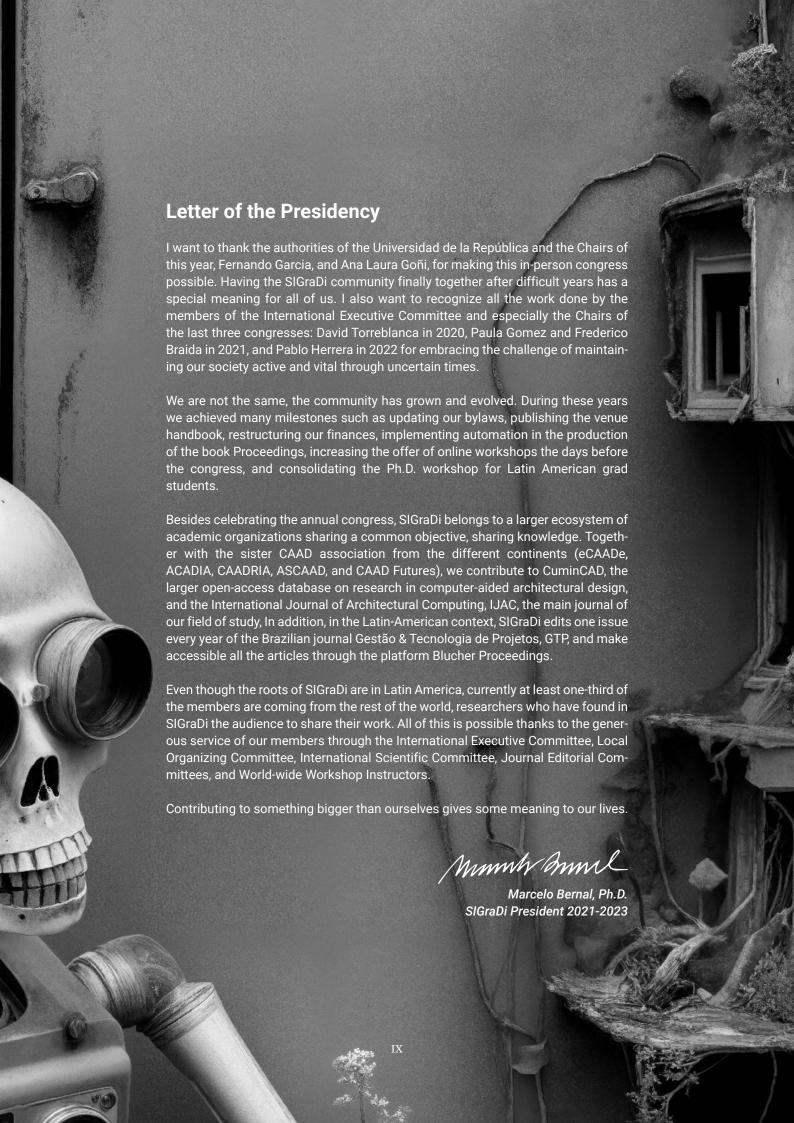
The Universidad de la República has been actively involved with the Ibero-American Society of Digital Graphics (SIGraDi) since its inception in 1997. Having hosted the congresses in 1999 and 2014 in the city of Montevideo, this time the venue of the congress has been moved to the eastern part of the country, specifically to Punta del Este, at the Eastern Regional University Center (CURE). This change emerges as a way to contribute to the democratization of cultural access to a region remote from the capital and to promote university decentralization.

Returning to an in-person format for the congress after three years of virtual meetings was a great challenge from several points of view, but at the same time, an inspiring goal. We want to thank all the participants, authors, and attendees of the congress. We knew that coming to an in-person event in Uruguay would be a very significant economic effort for many colleagues and friends. And yet, they came.

Hosting the congress in Punta del Este has been a pleasure, and we are gratified to have once again captured the interest of the SIGraDi community. We hope that this event has met everyone's expectations.

Hasta la próxima, Punta del Estel Hola, Barcelona!

> Fernando García Amen Ana Laura Goñi Fitipaldo



Schedule

WEDNESDAY 29

9.00hs - REGISTRATION 10.00hs - OPENING CEREMONY 10.30hs - KEYNOTE 1: NEIL LEACH

LUNCH BREAK

13.00hs - SESSIONS 15:00hs - COFFEE BREAK 15:30hs - KEYNOTE 2: MARIA KUPTSOVA 17.00hs - SESSIONS

Azotea de Haedo 19.30hs - OPENING COCKTAIL

THURSDAY 30

CURE
9.00hs - SESSIONS
10.30hs - COFFEE BREAK
11.00hs - KEYNOTE 3:
MANE TATULYAN

LUNCH BREAK

13.00hs - SESSIONS 15.00hs - COFFEE BREAK 15.30hs - KEYNOTE 4: ACHIM MENGES

17.00hs - SESSIONS

The Grand Montauk 21.00hs - DINNER

FRIDAY 01

CURE

10.30hs - KEYNOTE 5: MARCELO PAYSSÉ

LUNCH BREAK

13.00hs - SESSIONS 15.00hs - COFFEE BREAK 15.30hs - SESSIONS 17.00hs - ANNUAL MEETING

Casapueblo 19.00hs - CLOSING COCKTAIL

Global Stats

Submissions

Countries

Authors

Thematic Tracks



T1. Theories and Practices of Landscape design in digital accelerated contexts

Programming Cultures. Digital Heritage. Cultural Landscapes and new technologies. Design, Nature and Ecosystems.



T2. Parametric Design

Formal patterns of urban life. Shape grammars. Fractal geometries. Generative Design. Parametric Analysis. Machine Learning. Predictive Modeling.



T3. Digital Fabrication

Robotics. Manufacturing and Industry 4.0. Industrial design. Internet of Things. Hacker/maker culture. Digital craft.



T4. Virtual environments

Smart cities. Interfaces and devices. Landscape photogrammetric studies. Artificial intelligence. Big Data. Machine learning. AR/VR/MR.



T5. Education and research in hybrid contexts

New pedagogies and technologies after the Great Reset. Life Long Learning and Digital Education. Hybrid Education. Online Learning.



T6. Design, Nature and Ecosystems

Design based on nature. Biomimicry, Biodesign, Biodigital design, Sustainable Design, New relations between nature and design. Bio-inspired design. Living things.



T7. Artistic practices and creative industries

Convergencies through new technologies, architecture, design and cinema. Mapping. Audiovisual approaches. Artificial intelligence and media art.



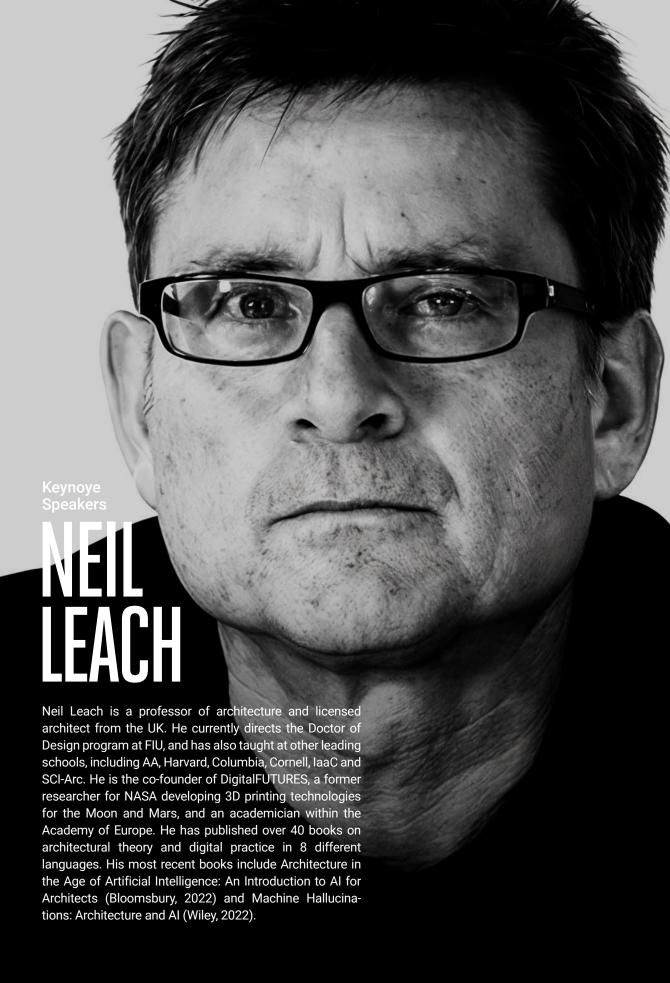
T8. Other computations

Decolonial design. Inclusive design. Covid 19. Codesign. UX. Interdisciplinary design. Open source. Gender equality. Interdisciplinary design. Open design.



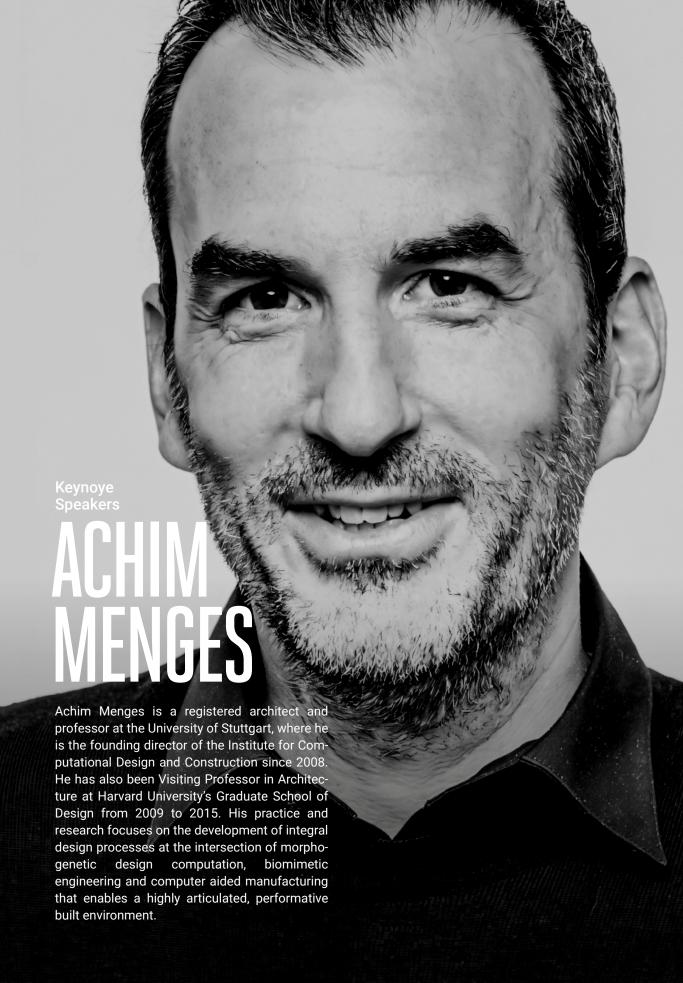
T9. Open Track

For papers related to Accelerated Landscapes but no related to the sub-tracks of SIGraDi 2023.











SIGraDi 2023 PROCEEDINGS

