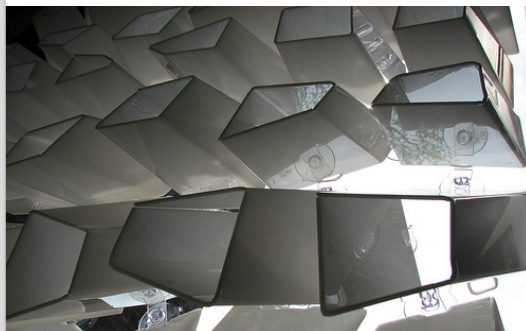# Symposium
ISCTE-IUL

Este simpósio permitirá reunir em Portugal, no ISCTE-IUL, um conjunto de investigadores de referência internacional, no campo da Fabricação Digital e da Arquitectura. Procura-se desafiar os participantes neste simpósio estimulando a reflexão e o debate sobre o modo como a computação pode contribuir para melhorar o desenho e a performance da arquitectura; como a experiência e percepção do espaço podem enriquecer-se através da integração de tecnologias emergentes; como a forma pode ser gerada e evoluir parametricamente e, acima de tudo, como tirar partido da modelação digital para produzir objectos físicos diferenciados.
Trata-se de um evento da maior relevância face aos novos desafios tecnológicos e de ensino da Arquitectura em Portugal. Com este simpósio pretende-se indicar e partilhar novas metodologias de trabalho, linhas de investigação e profissionalização. O simpósio será complementado por um Workshop sobre fabricação digital onde será possível experimentar algumas das tecnologias abordadas durante as conferências.

This symposium will bring together in Portugal, ISCTE-IUL, a set of internationally renowned investigators in the field of Digital Fabrication and Architecture. We challenge participants in this symposium to question and reflect on how the exploitation of computing can improve the design and performance of architecture; how the experience and perception of space can be enriched through the integration of emerging technologies; how shape can be parametrically generated and evolve and, above all, how to take advantage of digital modeling to produce different physical objects. This event is of great relevance in view of the new technological challenges and the teaching of Architecture in Portugal. With this event we aim to underline and share new conceptual and research methodologies as well as new career opportunities. The symposium will be followed by a Workshop on Digital Manufacturing where the participants can experience some of the technologies addressed to in the lectures.

http://digitalfabricationiscte.wordpress.com

Kevin Klinger
Ball State University (USA)

Kevin Klinger is Director of the Institute for Digital Fabrication at Ball State University, Associate Professor of Architecture and Director of the Post--Professional Master of Architecture program. He encourages explorations in digitally driven design, deploying techniques of digital fabrication. The Institute for Digital Fabrication operates with an ethic to "connect globally, and make locally," as it strives to both contribute to the discourse on the impact of the digital technological shift, while playing a role in translating opportunities to engage local industry and community partners.

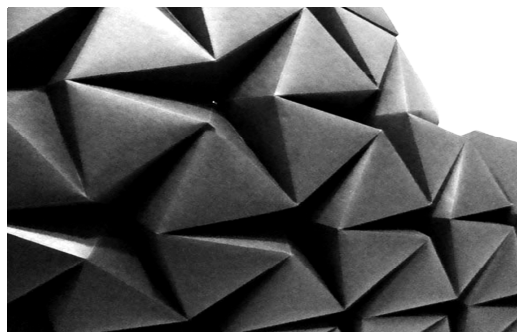# Bob Sheil
Bartlett School of Architecture (UK)

Bob Sheil is Senior Lecturer and Director of Technology and Computing at the Bartlett School of Architecture UCL, where he also runs units that explore the relationship between the digital and analogue in issues such as craft, prototyping and adaptive architecture. In 2007 he established The Bartlett's Digital Manufacturing Centre. He co-founded sixteen*(makers) whose most recent work, '55/02', is an exploration of digital design and manufacturing in collaboration with manufacturers Stahlbogen GmbH, of Blankenburg, Germany.

Vicente Guallart
Institute for Advanced Architecture of Catalonia IaaC (Spain)

Vicente Guallart is Director of the Institute of Advanced Architecture in Catalunya (IAAC). Pioneer of interaction between nature, technology and architecture, proposes new paradigms based in urban, social and cultural conditions emerging from information society. He crosses boundaries through collaborations in geology, sociology, engineering, fabrication, economics, and software design. Merging architecture, nature and new technology, Guallart is one of today's most exciting Spanish architects.
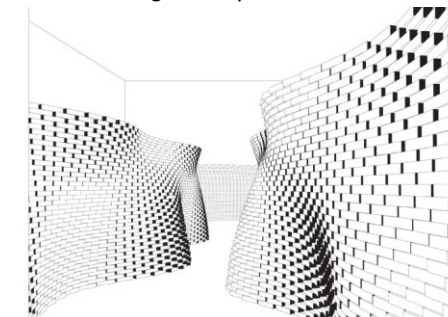
Gabriela Celani
UNICAMP (Brazil)

Gabriela Celani is Associate Professor at School of Civil Engineering, Architecture and Urban Design at Universidade Estadual of Campinas and Head of LAPAC - the laboratory of automation and prototyping for architecture and construction. She develops research on Computational Design which includes the application of theories and technologies from computation, logic, mathematics and AI in Architecture and Urbanism. Her work focuses on rapid prototyping, digital fabrication, 3D digitation and design and automation of the design project.
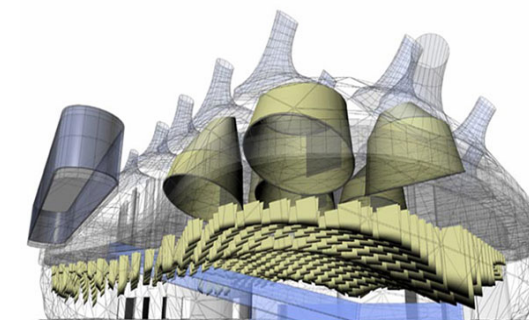
Tobias Bonwetsch
ETH Zurique (Switzerland)

Tobias Bonwetsch is Senior Researcher at ETH's Laboratory for Architecture and Digital Fabrication chaired by Gramazio & Kohler. His research is concerned with integrating the logic of digital fabrication into the architectural design process, with a special focus on additive production methods. As a result the brick façade for the Winery Gantenbein which received several awards was realized in 2006. In 2010, Tobias Bonwetsch co-founded ROB Technologies, a company that develops and implements robotic manufacturing processes at the interface of architectural design and the building industry.

José Pedro Sousa
(FAUP/DARQ/OpoLab, Portugal)

José P. Sousa is an architect, researcher and professor, interested in exploring the new conceptual and material possibilities emerging from the use of advanced digital design and manufacturing technologies. He taught at ESARQ-UIC and IAAC in Barcelona and currently at FAUP (Porto) and Darq (Coimbra). He co-founded the studio ReD, Research Design Studio, which got international recognition in the field, receiving important awards like the FEIDAD '05. He is now co-director of OPOLAB, the laboratory of architecture and design in Porto.

Programa | Program

September 15th

9h — Abertura | Oppening

9h30 — Keynote speaker
Kevin Klinger

11h — Intervalo | coffee-break

11h30 — Keynote speaker
Bob Sheil
"Manufacturing Bespoke Architecture"

13h — Almoço (livre) | Lunch (not included)

14h30 — Keynote speaker
Vicent Guallart
"Geologics"

16h — Workshop
José Pedro Sousa
Explorações Digitais > Realidades Materiais / Digital Explorations > Material Realities

September 16th

9h — Abertura | Oppening

9h30 — Keynote speaker
Gabriela Celani
"Digital Fabrication Laboratories: Impacts on Higher Education in Architecture and other Fields"

11h — Intervalo | coffee-break

11h30 — Keynote speaker
Tobias Bonwetsch
"Tailoring fabrication processes"

13h — Almoço (livre) | Lunch (not included)

14h30 — Workshop
José Pedro Sousa
Explorações Digitais > Realidades Materiais / Digital Explorations > Material Realities

Inscrição | Registration

	Until Jun 15th	After Jun 15th
Symposium		
Estudante ISCTE	ISCTE Student*	0€	0€
Estudante ou Participantes de entidades que integram a organização e patrocínios do symposium	Student* *or employees of the institutes that are organizing the event	45€	55€
Profissional	Professional	90€	100€
Symposium + Workshop		
Estudante ISCTE	ISCTE Student*	75€	100€
Estudante	Student**	100€	125€
Profissional	Professional	175€	200€

Inscrição online em: | online registration at:
http://digitalfabricationiscte.wordpress.com

* documentação não incluída | documentation not included

** cartão de estudante deve ser enviado por e-mail no momento do registo | students must email a copy of their student ID when registering

Poderá ser feito um desconto para inscrições institucionais em grupo (6 ou mais pessoas). Contacte a comissão organizadora para o efeito | Discounts may be available for institutional group booking (6 or more registrations), contact the Organizing Commitee for more details.

Local | Venue

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Tel: +351 217 903 060

Email:
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Maria João Gamito
Miguel Sales Dias
Nancy Diniz
Sara Eloy
Vasco Rato

Comissão organizadora | Organizing commitee
Alexandra Paio
Ricardo Resende
Sara Eloy
Hugo Coelho
Maria João Oliveira

© Gramazio & Kohler, ETH Zurich

Symposium Digital Fabrication a State of Art

Sep 15th-16th
ISCTE-IUL

Conferences by

Kevin Klinger
Ball State University

Vicente Guallart
Institute for Advanced Architecture Catalonia

Bob Sheil
Bartlett School of Architecture

Gabriela Celani
UNICAMP

Tobias Bonwetsch
ETH Zurique

Workshop by

José Pedro Sousa FAUP/DARQ/OpoLab