## "Computational Form and Material Gestalt"

November 20, 2009 12:30 - 2:00pm Room 4-237

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## Abstract

Achim Menges' research presented in this lecture focuses on computational design approaches that unfold morphological complexity and performative capacity without differentiating between form generation and materialization processes. Based on an understanding of material systems not as derivatives of standardized building systems and elements but rather as generative drivers in the design process this approach seeks to develop and employ computational techniques and digital fabrication technologies to unfold innate material capacity and specific latent gestalt. Extending the concept of material systems by embedding their material behavior, geometric characteristics, manufacturing constraints and assembly logics within integral computational processes promotes an understanding of form, material and structure not as separate elements, but rather as complex interrelations in polymorphic systems resulting from the response to varied input and environmental influences and derived through the logics and constraints of advanced manufacturing processes.

## Bio:

Professor Achim Menges is an architect and director of the Institute for Computational Design at Stuttgart University. Currently he also is Visiting Professor in Architecture at Harvard University's Graduate School of Design and Visiting Professor for the Emergent Technologies and Design Graduate Program at the Architectural Association in London.

He taught at the AA School of Architecture as Studio Master of the Emergent Technologies and Design Graduate Program from 2002 to 2009 and as Unit Master of Diploma Unit 4 from 2003 to 2006.. From 2005 to 2008 he was Professor for Form Generation and Materialisation at the HfG Offenbach University for Art and Design in Germany. In addition he has held visiting professorships in Europe and the United States.

Achim Menges research focuses on the development of integral computational design processes that enable a highly articulated, performative built environment. His research projects have been published and exhibited worldwide and received numerous international awards.