Colloquium

Light, matter, form - Computational design of functional geometry

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Host: Chris Wojtan

In this talk, I will outline a general computational approach for the design of functional geometry. The key step is to identify suitable geometric abstractions of physical properties that enable effective computations with high predictive accuracy. I will focus on two examples of this approach, one for interactive design of complex 3D shapes with 2D auxetic materials, the other for performative optimization of light re-directing surfaces. These studies illustrate how to leverage geometric insights, mathematical theory, and advanced algorithms to develop effective computational tools for material-aware design of performative geometry.

Monday, January 29, 2018 04:00pm - 05:00pm
Raiffeisen Lecture Hall, Central Building

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