Einladung zum Vortrag

Adventures in Extrusion Additive Manufacturing

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Additive manufacturing (AM) is an ideal synergy of machines, materials, and computation. While many well-known AM processes will grow in value and significance, there remains great opportunity to overcome barriers to scale and quality by innovation within and beyond current AM techniques. I will discuss our recent work spanning the spectrum of extrusion AM, including: the invention of a high-speed desktop extrusion printer that can produce handheld polymer and composite parts in 5-10 minutes; evaporative extrusion processes for 3D self-assembly of colloidal cellulose-based particles and materials: and commercial development of an extrusion-based metal AM process at the startup company Desktop Metal. I will close with a summary of our AM education initiatives at MIT, including a new digitally delivered professional course.

Advances in Computational Mechanics

Montag, 18.11.2019 MW 1237 11.30 Uhr

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