

M. Sederberg, Coreform LLC

A new highly accurate and performant approach to FEA is to run simulations directly on smooth splines, the building blocks of CAD models. Thousands of academic papers have been published since 2005 investigating this approach, including many at this very conference. Coreform LLC was formed in 2014 to be 100% focused on commercializing smooth-spline based simulation, and has invented a new unstructured spline type to enable commercial applications. We work closely with LSTC to send unstructured splines to LS-DYNA for simulation. We are also writing Coreform Analyze (beta), a commercial solver natively built to run on a smooth spline basis.

In all of these efforts, we are focused on delivering better accuracy in less time, increased robustness, and lower simulation costs, and we are trying to do this with a minimal change to commercial workflows.

In this presentation, we share an update on our commercial efforts, discuss new potential engineering workflows, and share our vision of why isogeometric analysis has such powerful commercial promise.