IGA FOR OPTIMIZATION PROBLEMS

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MINISYMPOSIUM

Over the past several years, research in isogeometric analysis (IGA) has reduced the geometric divide between computer-aided design (CAD) systems and finite element analysis (FEA) software. The close integration of CAD and analysis provides distinct advantages in the context of design optimization (e.g., size, shape, and topology optimization) and inverse problems more generally, though IGA-based design optimization also comes with its own challenges. The goal of this mini-symposium is to bring together experts in computer-aided geometric design, numerical analysis, design optimization, and stochastic modeling to discuss the challenges and opportunities of using IGA for design optimization with or without uncertainties.