16th World Congress on Computational Mechanics and 4th Pan American Congress on Computational Mechanics

July 21-26, 2024, Vancouver Convention Centre, Vancouver, British Columbia, Canada

INDUSTRIAL APPLICATIONS OF IGA

Hugo Casquero*¹ and Emily Johnson² and Clint Nicely³ and Attila Nagy⁴ and Jessica Zhang⁵ and Ming-Chen Hsu⁶

¹University of Michigan - Dearborn

²University of Notre Dame

³Raytheon Technologies

⁴Ansys, Inc.

⁵Carnegie Mellon University

⁶Iowa State University

MINISYMPOSIUM

Isogeometric analysis (IGA) was originally introduced to achieve seamless integration of computer-aided design (CAD), computer-aided engineering (CAE), and computer-aided manufacturing (CAM). Many IGA technologies have undergone significant advancements since their introduction, including the development of splines that are simultaneously suitable for CAD, CAE, and CAM and the use of spline-based immersed approaches. IGA and its extensive applications continue to evolve as these methods transition from academia into industry. This minisymposium will feature a broad representation of industrial results and IGA research projects, including presentations from academics consulting on industry projects, software vendors, end users, and academics working on large-scale parallel implementations of IGA.