'HPC and Uncertainty Treatment' Examples with Open TURNS and Uranie

Presentation

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Objectives and Principles

▶ to present the methodology of treatment of uncertainty to the HPC community
  ▪ to get benefit of their knowledge on some HPC aspects specific to the Uncertainty Management

▶ to apply the methodology to one simple case study: deviation of the free extremity of beam due to a load

▶ using either OpenTURNS or Uranie

▶ Content:
  ▪ Day 1: Presentation of the Methodology; Basics of Probability and Statistics; Presentation of Open TURNS and Uranie
  ▪ Day 2: Uncertainty Quantification Propagation and Ranking; OpenTURNS and Uranie
  ▪ Day 3: HPC aspects specific to the Uncertainty Management

▶ Trainers: Consortium OpenTURNS and CEA

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