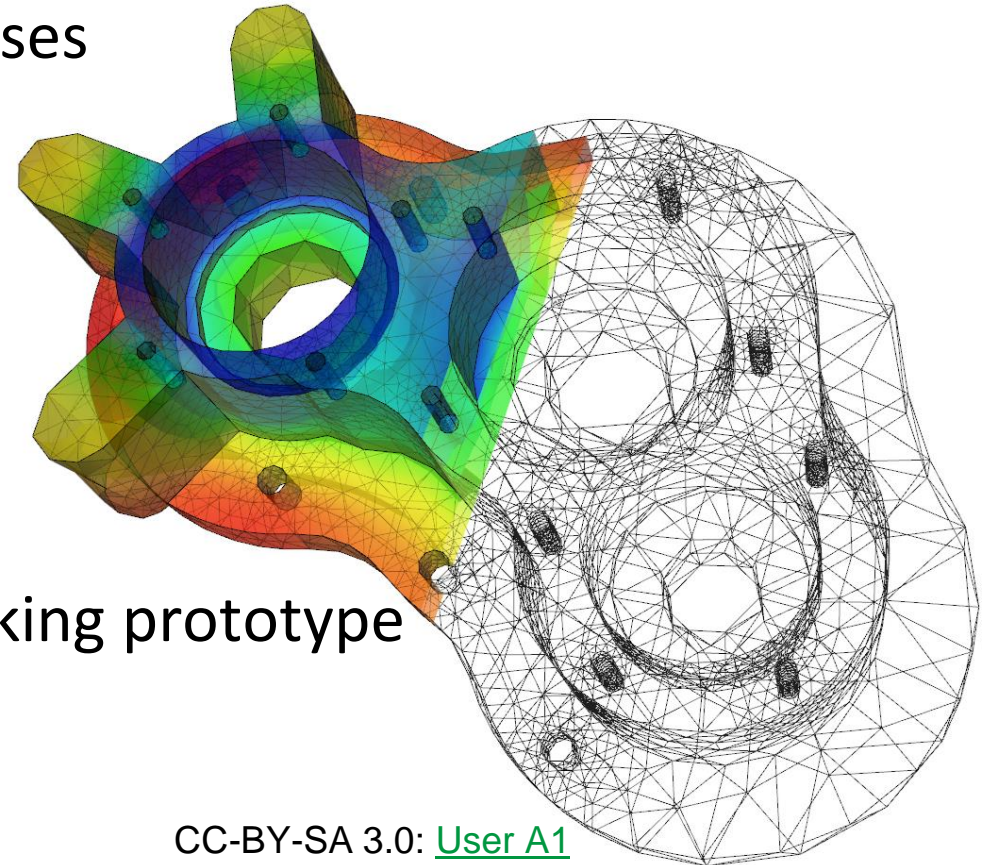# 25 years of ITEA roadshow – The Netherlands
Project idea: Data driven solver acceleration

25 May 2023 | Utrecht, the Netherlands
dr.ir. D.C. van Vugt

25 years

ITEA4
1998–2023

ITEA is the Eureka Cluster on software innovation

Which problem do you want to solve?

- Simulations (e.g. for Digital Twins, …) are often limited by matrix solves
  This limits applicability and causes large compute spend and CO_2 output

- Solvers have no knowledge of similarity of cases
  $\rightarrow$ Use ML to learn solution patterns and
  use it to solve future problems faster

- Based on our experience with simulations
  and Physics Informed Neural Networks
  for Nuclear Fusion we have developed a working prototype

25 years

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Σ

What are you looking for?

- **Missing partners / expertise**
  - Simulation program developers
  - Applications of matrix solutions outside of simulation
  - Green computing initiatives
  - HPC centres

- **Partners already involved**
  - Plasma Matters BV (The Netherlands, MIT R&D collaboration)
  - Eindhoven University of Technology (The Netherlands)

Contact details

- **dr.ir. D.C. (Daan) van Vugt**
  Ignition Computing
  dvanvugt@ignitioncomputing.com
  +31 6 52 02 88 91