



### **2021 ALTAIR STUDENT WEBINAR SERIES**

Laura Rosso / Academic Liaison and Business Development Representative

#### Laura Rosso

- Engineer's Degree in Industrial Engineering at University Carlos III of Madrid, Spain.
- Master's Degree in Industrial Engineering at University Carlos III of Madrid.
- Academic Liaison at Altair Spain since February 2020.
- Business Development Representative at Altair Spain since April 2021.





## **Agenda**

### Sept 9<sup>th</sup> – EMEA & APAC Time (CEST)

Time CEST	Presenter	Topic
10.00 a.m. – 10.05 a.m.	Laura Rosso	Altair: Getting Started with Simulation
10.05 a.m. – 11.00 a.m.	Conor Smith and Marco Armellin	Lightweight Design with Altair Inspire
11.00 a.m. – 12.00 noon	Pedro Salvadores	CAD Design & Rendering of Simulation Results with Altair Inspire Studio
12.00 noon – 12.40 p.m.	Rafael Silva	Simulation of Multiphysics Phenomena with Altair Simlab
12.40 p.m.	End of Session	End of Session



# WHAT IS AND WHY USE SIMULATION DRIVEN DESIGN?

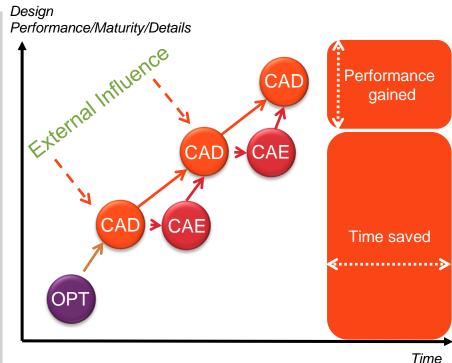


### **Simulation-Driven Design**

### **Classic Development Approach**

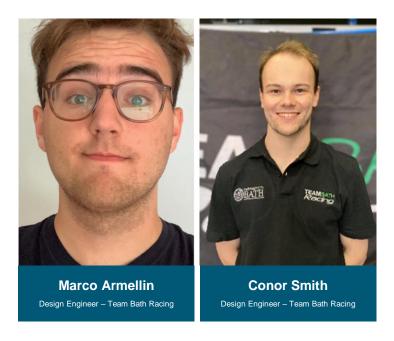
# Design Performance/Maturity/Details External Influence CAD<sub>n+1</sub> CAE<sub>n-1</sub> CAE Modell Result Time

### **Simulation Driven Design**



### Altair Inspire

- Mechanical Engineering graduates from University of Bath, United Kingdom.
- Design engineers specialising in the design of outboard suspension components.
- Members of Team Bath Racing:
  - Founded in 2000 one of the first UK teams.
  - 25 mechanical engineering students.
  - 1st FS Czech 2016, 3rd FS Austria 2018 and 1st FS UK 2020 (virtual).





## **Accelerate Simulation-driven Design**

### **Altair Inspire**

Altair Inspire accelerates the creation, optimization, and study of innovative, structurally efficient parts and assemblies.

- · Create and modify designs with ease.
- Optimize for manufacturability.
- Simulate at the speed of design.



# Q&A ALTAIR INSPIRE



### Altair Inspire Studio

- Aeronautical Engineer from University of León, Spain.
- Professor of applied physics and chemistry department at University of León.
- Member of the applied physics area at University of León.
- Technical director of RTULE project, Racing Team Universidad de León.





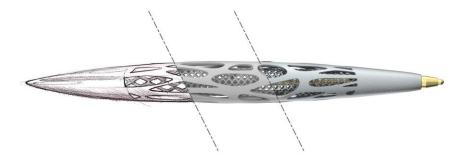
## **All-in-one Industrial Design Solution**

### **Altair Inspire Studio**

Inspire Studio is the new solution for innovative designers, architects, and digital artists to create, evaluate and visualize designs faster than ever before.

- Enhance creativity by letting designers drive their design
- Mix and match modelling techniques
- Create stunning images and complex animations



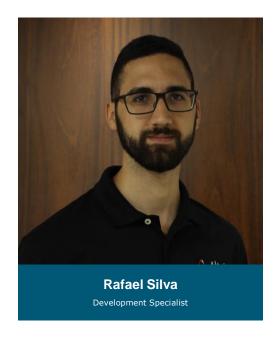


# Q&A ALTAIR INSPIRE STUDIO



#### Altair SimLab

- Bachelor's degree in Mechanical Engineering at Federal University of Pernambuco, Brazil.
- Development Specialist since January 2019.
  - Altair SimLab Learning Center Manager.
- Global Technical Team member since July 2020.
  - Altair SimLab Trainings.
- Technical Documentation Engineer for Altair SimLab from May 2017 to December 2018.



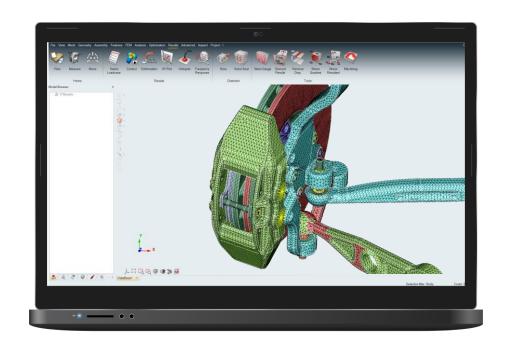


### **Multiphysics Workflows with CAD Associativity**

#### Altair SimLab

SimLab is a process-oriented multidisciplinary simulation environment to accurately analyse the performance of complex assemblies. Multiple physics including structural, thermal, e-mag, and fluid dynamics solvers.

- Highly efficient, feature-based modeling approach
- Create templates to enable CAE automation
- Multiphysics analyses locally or in the cloud



# Q&A ALTAIR SIMLAB



# **THANK YOU**

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#ONLYFORWARD

