Andrea Cini's biography

Andrea Cini obtained the BSc in Aerospace Engineering and the MSc in Aeronautical Engineering, with specialisation in Aircraft Structure, from the University of Pisa respectively in 2003 and 2006.

Andrea earned the PhD degree at Cranfield University, UK, in the field of Fatigue and Damage Tolerance, in 2009, investigating the short crack development at the root of maintenance-induced scratches as part of the Scribe Marks research programme, funded by Airbus. Subsequently he developed his research activity in Aerostructures and Fatigue and Damage Tolerance as research Fellow at Cranfield University and Scuola Sant'Anna, Pisa, working on damage evolution in metallic and composite materials and design of bio-inspired flapping wing robots.

In 2013 Andrea moved to industry, as manager of the Design and Development department of Asso Werke s.r.l., an Italian automotive company of 400 employees producing engine pistons and cylinders for sports cars and motorbikes. At Asso Werke he designed pistons for customers, such as Ferrari, Audi, BMW, McLaren, developing thermo-mechanical stress analysis procedures and multiaxial fatigue prediction methods.

Andrea came back to academia in November 2015 joining the Centre for Aerospace Manufacturing at the University of Nottingham, UK, where he currently works. At Nottingham he is involved as Project Manager and Stress and Design technical authority in the Clean Sky 2 EU research project, ASTRAL, where his team designs a novel lightweight composite joined wing for a new compound helicopter flying demonstrator (RACER), in partnership with Airbus Helicopters and GE Aviation. Andrea also occupies the position of Aerostructures Theme Lead at the Centre for Aerospace Manufacturing with the task of developing research projects and industrial collaborations in the field of Aircraft Structural Design. His research focuses on innovative aircraft structural configurations, minimum weight optimisation, conceptual design tools, "Non-black metal" composite design and damage evolution prediction in aerospace materials.