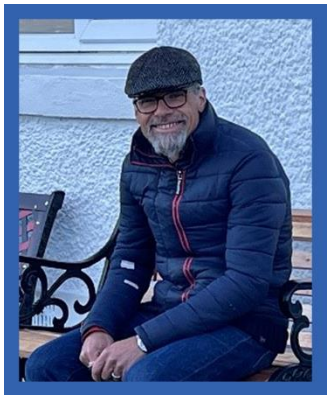

Luca Susmel joined Sheffield Hallam University in September 2024 as a Transforming Lives Fellow (Professor of Structural Integrity). Since 1998, Luca has focused primarily on the static, dynamic, and fatigue assessment of engineering materials and components. By working in Italy (University of Padova, University of Ferrara, University of Udine), Ireland (Trinity College, Dublin), and the UK (University of Sheffield, Sheffield Hallam University), he has developed several novel engineering methods for designing components (experiencing any type of stress concentration) against static, dynamic, and fatigue failures. Luca's approach involves both theoretical and experimental investigations, with all the design methods he has formalised thoroughly validated through systematic experimental work. Luca has unique expertise in designing notched and welded components to withstand constant and variable amplitude multiaxial fatigue.

His work in these research areas has resulted in a large number of scientific articles and a book on multiaxial fatigue assessment (Susmel, L., Multiaxial Notch Fatigue: From Nominal to Local Stress-Strain Quantities, Woodhead & CRC, Cambridge, UK, ISBN: 1 84569 582 8, March 2009). His scientific papers have garnered significant interest from the international scientific community, as evidenced by his h-index and total citation count (https://scholar.google.com/citations?hl=en&user=QtApaGEAAAAJ). Based on that, the Clarivate Analytics/Elsevier/University of Stanford research area comparison ranking (https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3)of worldwide scientists and engineers indicates that Luca is in the top 2%.

He serves on the editorial boards of two leading international journals in the fatigue and fracture field, namely International Journal of Fatigue and Fatigue & Fracture of Engineering Materials & Structures. Luca is also the Editor-in-Chief of Theoretical and Applied Fracture Mechanics (published by Elsevier), one of the top journals in the fracture mechanics field.

Luca has developed software specifically designed to perform fatigue assessments of plain, notched, and welded components subjected to both constant and variable amplitude uniaxial/multiaxial fatigue loading (Copyright document No. 007849-D007048). Regarding the practical application of his research, especially after the publication of his book, Luca's expertise has been sought by many structural engineering firms across Europe and beyond. These firms have successfully applied his methods to design real-world components and structures.

Since the late 1990s, Luca has been involved, both as a principal investigator and as a co-investigator, in numerous research projects funded by national public bodies, the European Community, trusts, and private companies.