Paolo Di Barba, DSc PhD was appointed a full professor of electrical engineering in tenure track position at the University of Pavia in the year 2002, where currently he chairs the Faculty Board ruling BSc and MSc degrees in Industrial Engineering. He is also the Head of the Research Centre for the History of Electrical Technology.

He is responsible for the Electromagnetic Device CAD Laboratory at the Department of Electrical, Computer and Biomedical Engineering, University of Pavia, where he leads a group of scientists active in the area of computational electromagnetism.

Moreover, at the Lodz University of Technology, Poland, after receiving the DSc degree, he has held a position of a visiting professor at the International Faculty of Engineering since the year 2013.

Currently, his core activity is focused on numerical methods for field analysis and synthesis, respectively. The former include the finite-element method for single-physics and multi-physics domains as well as the virtual-element method, which extends the capabilities of the finite-element method to polygonal and polyhedral elements. In turn, the latter includes multiobjective evolutionary computing and, more recently, the synthesis of physics-informed neural networks for solving non-linear inverse problems. Applications cover the automated optimal design of induction heating devices for electromagnetic processing of materials, permanent-magnet motors for electric vehicles, antennas for wireless body area networks, to name but the few. In the area of multiobjective optimal design, he has been one of the pioneering researchers who contributed to the application of the theory of Pareto optimality to computational electromagnetism.

In terms of editorial activity, Paolo Di Barba is author or co-author of more than 200 papers, presented at international conferences or published in international journals. In particular, he is a co-editor of the book entitled “Optimal Design Exploiting 3D Printing and Metamaterials” (IET, 2021), co-author of the monograph entitled “MEMS Field Models and Optimal Design” (Springer, 2019), the author of the monograph entitled “Multiobjective Shape Design in Electricity and Magnetism” (Springer, 2010), and a co-author of the textbook entitled “Field Models in Electricity and Magnetism" (Springer, 2008).

He inspired and substantially contributed to define and solve two benchmark problems, internationally recognized as references in multiobjective magnetic design (TEAM-32 problem) and induction heating analysis (TEAM-36 problem), respectively (https://www.compumag.org/wp/team).

He is a member of the Board of the International Compumag Society, a major international forum for the electromagnetic community worldwide; moreover, he is the chair of the Steering Committee of the International Workshop on Optimization and Inverse Problems in Electromagnetism (OIPE), as well as an associate editor of the IEEE Transactions on Magnetics – Conferences. Moreover, he has been appointed as the editorial board co-chair of the IEEE COMPUMAG-2025 conference.

For his scientific achievements, in 2021 the President of Poland conferred on him the title of Professor, the highest academic award.