Laurent Ponson, Tortoise

Laurent Ponson is currently a CNRS researcher at Institut of Mechanics d'Alembert of Sorbonne Université in Paris and CEO of the start-up Tortoise that develops and commercializes disruptive technology of mechanical characterization based on the statistical analysis of the fracture surface of materials.

Dr. Ponson holds an engineer degree from the engineering school Centrale Paris and a PhD in physics from Ecole Polytechnique in Palaiseau, France. He worked three years in the mechanics department of the California Institute of Technology as a post-doctoral researcher before joining Sorbonne University as a CNRS researcher.

Dr. Ponson’s expertise encompasses the failure of materials and its statistical aspects. He develops new concepts and approaches at the interface between data science and solid mechanics that allow for an improved understanding and characterization of the failure behavior of materials. He is the author of about 50 publications in the best journals of physics and mechanics. He is also the inventor of four international patents, among which a method of toughness assessment based on the quantitative fractographic analysis of the fracture surfaces of materials. Last but not least, Dr. Ponson is also involved in the popularization of science and mechanics to a broad audience through different actions on TV, at the theatre or through public lectures.