Fred Vermolen

Fred Vermolen is an applied mathematician with a full professorship at the department of Mathematics and Statistics at the University of Hasselt in Belgium. His interests are in applied

Mathematics, where he works on the analysis and numerical solution of partial differential equations and uncertainty quantification with applications in medical biology, metallurgy and porous media.

From a medical point of view, he is currently dealing with mathematical models for cancer metastasis, burn injuries and pressure / diabetic ulcers. His long-term objective is to contribute to the development of digital twins (virtual patients) by the quantification of biomedical processes (in particular related to skin and cancer) and by using machine learning techniques aiming at more successful therapies and at a reduction of the number of animal experiments.