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Nota di contenuto	Introduction -- Fluid Mechanics History -- Fluid-mechanical description of blood flow -- Cardiac flow visualization techniques -- Techniques for the validation of numerical models.
Sommario/riassunto	This book aims to show how hemodynamic numerical models based on Computational Fluid Dynamics (CFD) can be developed. An approach to Fluid Mechanics is made from a historical point of view focusing on the Navier-Stokes Equations and a fluid-mechanical description of blood flow. Finally, the techniques most used to visualize cardiac flows and validate numerical models are detailed, paying special attention to Magnetic Resonance Imaging (MRI) in case of an in vivo validation and Particle Image Velocimetry (PIV) for an in vitro validation.