

Mathematical Modeling of Blood Flow

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The mathematical investigation of the cardiovascular system has seen vast and clear progress in the last three decades. Such progress allowed, for the first time, to obtain computational solutions of mathematical models thought to be sufficiently general to be considered realistic. However, a big gap between the state of the art of cardiovascular modeling and its use by the medical community remains open. This is due to the fact that tools based on patient-specific numerical simulations should be sufficiently accurate and reliable to be used by clinicians in medical practice. In this talk, we will address some techniques that may be used to improve the reliability of computational models of the cardiovascular system.

References

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