Publications

Doctoral Dissertation

Kartik Jain. *Transition to Turbulence in Physiological Flows: Direct Numerical Simulation of Hemodynamics in Intracranial Aneurysms and Cerebrospinal Fluid Hydrodynamics in the Spinal Canal.* PhD thesis, Universität Siegen, Germany, 2016.

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[1] **Kartik Jain**, Jingfeng Jiang, Charles Strother, and Kent-André Mardal. Transitional hemodynamics in intracranial aneurysms - comparative velocity investigations with high resolution lattice Boltzmann simulations, normal resolution ANSYS simulations and MR imaging. *Medical Physics*, 43:6186–6198, 2016. PMID:27806613.

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[7] Stefan Engelhard, Lennart van de Velde, Erik Groot Jebbink, **Kartik Jain**, Clark Zeebregts, Michel Versluis, and Michel Reijnen. Blood flow quantification in peripheral arterial disease: emerging diagnostic techniques in endovascular surgery. volume 38. May 2021. PMID:33970476.

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[9] Arndt Wagner, Elissa Eggenweiler, Felix Weinhardt, Zubin Trivedi, David Krach, Christoph Lohrmann, **Kartik Jain**, Nikolaos Karadimitriou, Carina Bringedal, Paul Voland, Christian Holm, Holger Class, Holger Steeb, and Iryna Rybak. Permeability estimation of regular porous structures: A benchmark for comparison of methods. *Transport in Porous Media*, 00:1–23, 2021.

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