

Vatsal Sanjay
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Physics of Fluids
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Research interests

Direct Numerical Simulations of drops, bubbles, and jets at low Reynolds numbers

Employment

Researcher

Physics of Fluids
University of Twente
1 Jul 2023 → present

Researcher

MESA+ Institute
University of Twente
1 Jul 2018 → present

Research outputs

Drop impact on viscous liquid films

Sanjay, V., Lakshman, S., Chantelot, P., Snoeijer, J. H. & Lohse, D., 10 Mar 2023, In: Journal of fluid mechanics. 958, A25.

When does an impacting drop stop bouncing?

Sanjay, V., Chantelot, P. & Lohse, D., 10 Mar 2023, In: Journal of fluid mechanics. 958, A26.

Taylor–Culick retractions and the influence of the surroundings

Sanjay, V., Sen, U., Kant, P. & Lohse, D., 10 Oct 2022, In: Journal of fluid mechanics. 948, p. 1-37 37 p., A14.

Impact Forces of Water Drops Falling on Superhydrophobic Surfaces

Zhang, B., Sanjay, V., Shi, S., Zhao, Y., Lv, C., Feng, X-Q. & Lohse, D., 2 Sept 2022, In: Physical review letters. 129, 10, 104501.

When does an impacting drop stop bouncing?

Sanjay, V., Chantelot, P. & Lohse, D., 11 Aug 2022.

Viscous Free-Surface Flows

Sanjay, V., 15 Jul 2022, Enschede: University of Twente. 306 p.

Drop impact on viscous liquid films

Sanjay, V., Lakshman, S., Chantelot, P., Snoeijer, J. H. & Lohse, D., 13 Jun 2022, ArXiv.org.

Bursting bubble in a viscoplastic medium

Sanjay, V., Lohse, D. & Jalaal, M., 10 Sept 2021, In: Journal of fluid mechanics. 922, A2.

Bursting bubble in a viscoplastic medium

Sanjay, V., Lohse, D. & Jalaal, M., 19 Jan 2021, ArXiv.org, (arXiv.org).

Lifting a sessile oil drop from a superamphiphobic surface with an impacting one

Ramírez-Soto, O., Sanjay, V., Lohse, D., Pham, J. T. & Vollmer, D., 19 Aug 2020, In: Science advances. 6, 34, eaba4330.

Consequences of Inclined and Dual Jet Impingement in Stagnant Liquid and Stratified Layers

Jain, A., Sanjay, V. & Das, A. K., 26 Jan 2019, In: AIChE journal. 65, 1, p. 372-384

Formation of fluid structures due to jet-jet and jet-sheet interactions

Soni, A., Sanjay, V. & Das, A. K., 14 Dec 2018, In: Chemical engineering science. 191, p. 67-77 11 p.

Numerical Assessment of Hazard in Compartmental Fire Having Steady Heat Release Rate from the Source

Sanjay, V. & Das, A. K., 2018, In: Building Simulation. 11, p. 613-624

Formation of liquid chain by collision of two Laminar jets

Sanjay, V. & Das, A. K., 1 Nov 2017, In: Physics of fluids. 29, 11, 112101.

On air entrainment in a water pool by impingement of a jet

Sanjay, V. & Das, A. K., 1 Nov 2017, In: AIChE journal. 63, 11, p. 5169-5181 13 p.