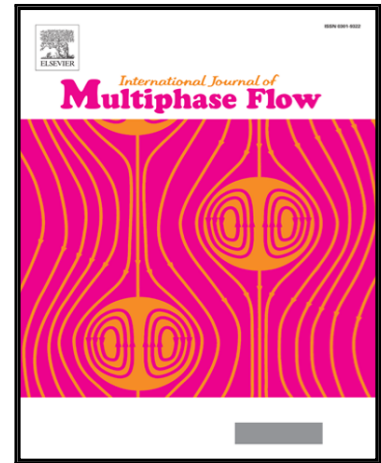


## Accepted Manuscript

A comparative analysis of the effective and local slip lengths for liquid flows over a trapped nanobubble

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PII: S0301-9322(17)30908-4  
DOI: [10.1016/j.ijmultiphaseflow.2018.03.001](https://doi.org/10.1016/j.ijmultiphaseflow.2018.03.001)  
Reference: IJMF 2756



To appear in: *International Journal of Multiphase Flow*

Received date: 21 November 2017  
Revised date: 28 February 2018  
Accepted date: 3 March 2018

Please cite this article as: Haibao Hu , Dezheng Wang , Feng Ren , Luyao Bao , Nikolai V. Priezjev , Jun Wen , A comparative analysis of the effective and local slip lengths for liquid flows over a trapped nanobubble, *International Journal of Multiphase Flow* (2018), doi: [10.1016/j.ijmultiphaseflow.2018.03.001](https://doi.org/10.1016/j.ijmultiphaseflow.2018.03.001)

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**Highlights**

- The study reports the results of molecular dynamics simulations of slip flows over smooth surfaces with nanobubbles trapped by the wettability step.
- The spatial distribution of the local and effective slip lengths at surface of the nanobubble is analyzed.
- The dependence of slip length on the gas areal fraction, shear rate, pinned and continuous interfaces are studied in the manuscript.

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