

Accepted Manuscript

Settling behavior of two particles with different densities in a vertical channel

Deming Nie , Jianzhong Lin , Qi Gao

PII: S0045-7930(17)30267-0
DOI: [10.1016/j.compfluid.2017.07.021](https://doi.org/10.1016/j.compfluid.2017.07.021)
Reference: CAF 3554



To appear in: *Computers and Fluids*

Received date: 9 March 2017
Revised date: 9 July 2017
Accepted date: 23 July 2017

Please cite this article as: Deming Nie , Jianzhong Lin , Qi Gao , Settling behavior of two particles with different densities in a vertical channel, *Computers and Fluids* (2017), doi: [10.1016/j.compfluid.2017.07.021](https://doi.org/10.1016/j.compfluid.2017.07.021)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- We present simulations of two particles settling in a channel with different densities.
- The staggered steady state of particles is studied in detail.
- Two kinds of periodic states are observed according to the Reynolds number Re .
- The amplitude of periodic oscillation decreases as particle density difference increases for small Re , while the opposite is true for large Re .

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/5011763>

Download Persian Version:

<https://daneshyari.com/article/5011763>

[Daneshyari.com](https://daneshyari.com)