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Type: **Poster (+) Presentation**

Fluid-structure interactions in a soft-walled Hele-Shaw cell

Wednesday, 2 June 2021 09:00 (1 hour)

The interaction of viscous and interfacial flows with soft materials has recently attracted substantial interest from a variety of different perspectives. Here, we study these interactions in the context of a model problem: Flow in a deformable Hele-Shaw cell, where one wall is rigid and the other is soft. Combining experiments with mathematical modelling, we consider the coupling of flow and deformation as air is injected into a cell initially filled with viscous fluid. We examine how deformation affects the viscous fingering instability and discuss the implications of our results for related physical systems.

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Time Block Preference

Time Block A (09:00-12:00 CET)

References

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Student Poster Award

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