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Swalbe.jl - Droplets, Dewetting, Dynamic Contact Angles

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Swalbe.jl is an open source lattice Boltzmann based solver for thin film dynamics [1]. Intended for problems ranging from the relaxation or coalescence of droplets to the dewetting of thin films on complex substrates [2]. Features such as thermal fluctuations or spatially resolved contact angles are readily usable and shown to agree with theoretical predictions [3,4]. Switchable substrates can be realized adding a temporal component to the contact angle [5].

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3. Mecke, K., & Rauscher, M. (2005), On thermal fluctuations in thin film flow, *Journal of Physics: Condensed Matter*, 17(45), S3515
4. Zitz, S., Scagliarini, A. & Harting, J. (2021), Lattice Boltzmann simulations of stochastic thin film dewetting, *Physical Review E*, 104(3), 034801.
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