On the asymptotic limit of the Navier-Stokes system with rough boundary

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We study the asymptotic behaviour of solutions to the incompressible Navier-Stokes system considered on a sequence of spatial domains, whose boundaries exhibit fast oscillations with amplitude and characteristic wave length proportional to a small parameter. This is a joint work with D. Bucur and E. Feireisl.

REFERENCES

 D. Bucur, E. Feireisl, Š: Nečasová, J. Wolf, On the asymptotic limit of the Navier-Stokes system in domains with rough boundaries, Journal of Differential Equations, 224 (2008), pp. 2890–2908.