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Homogenization of random Navier-Stokes type system for electrorheological fluid

Andrey Piatniski

Narvik University, Norway and Lebedev Physical Institute, Russia andrey@sci.lebedev.ru

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Abstract. The talk will focus on homogenization of Navier-Stokes type system describing electrorheological fluid with random characteristics. Assuming that the viscous stress tensor of the fluid satisfies p(.) growth conditions with random rapidly oscillating function p, we derive the homogenized model and study the properties of the effective tensor.

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