Abstract Submitted for the DFD05 Meeting of The American Physical Society

Homogenization of advection diffusion equations with microstructure IGOR MEZIC, THOMAS JOHN, University of California, Santa Barbara — We consider the flow of suspended rod-like microstructure in a thin long channel and perform homogenization over the cross section to obtain effective equations. We obtain correction terms to the effective diffusivity as obtained by Taylor's analysis when the diffusion of the microstructure is not isotropic.

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Date submitted: 15 Aug 2005 Electronic form version 1.4