

107. Zvi Artstein, Jasmine Linshiz and Edriss S. Titi, **Young measure approach to computing slowly advancing fast oscillations.** Multiscale Modeling and Simulation 6 (2007), 1085-1097.

**Abstract.** We offer a multiscale strategy to compute the solution of a singularly perturbed system when the fast dynamics oscillates rapidly; namely, the fast dynamics, rather than settling on a manifold of smaller order, forms cycle-like limits which advance along with the slow dynamics. We adopt the Young measure approach and, in particular, compute the tube of limit cycles, hence getting a good approximation for arbitrarily small singular parameters. Possible algorithms are displayed and concrete numerical examples are exhibited.

For a copy of this paper please send a request to [zvi.artstein@weizmann.ac.il](mailto:zvi.artstein@weizmann.ac.il)