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Erin Compaan, Renato Luca' and **Gigliola Staffilani*** (gigliola@mit.edu), MIT Room 2-251, 77 Massachusetts Avenue, Cambridge, MA 02138. *Pointwise convergence of the Schrödinger flow.*

In this paper we address the question of the pointwise almost everywhere limit of nonlinear Schrödinger flows to the initial data, in both the continuous and the periodic settings. Then we show how, in some cases, certain smoothing effects for the non-homogeneous part of the solution can be used to upgrade to a uniform convergence to zero of this part, and we discuss the sharpness of the results obtained. We also use randomization techniques to prove that with much less regularity of the initial data, both in continuous and the periodic settings, almost surely one obtains uniform convergence of the nonlinear solution to the initial data, hence showing how more generic results can be obtained. (Received September 16, 2019)