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Zero-dispersion limit for the Benjamin-Ono equation

We discuss the zero-dispersion limit for the Benjamin-Ono equation on the torus given a bell-shaped initial data. We prove that the solutions admit a weak limit as the dispersion parameter tends to zero, which is explicit and constructed from the Burgers' equation. The approach relies on the complete integrability for the Benjamin-Ono equation from Gérard, Kappeler and Topalov, and also on the spectral study of the Lax operator associated to the initial data in the zero-dispersion limit.