

Nemzer, Dennis**Boehmians on the torus.** (English) [Zbl 1132.46029](#)

Bull. Korean Math. Soc. 43, No. 4, 831-839 (2006).

Relaxing the conditions on the defining delta sequence, the author constructs and studies a space $\beta(T^d)$ of Boehmians on the torus that contains the space of distributions as well as the space of hyperfunctions on the torus. He also shows that the Fourier transform is a continuous mapping from $\beta(T^d)$ onto a subspace of Schwartz distributions, and that a sequence of Boehmians converges if and only if the corresponding sequence of Boehmians converges in $\mathcal{D}'(\mathbb{R}^d)$.

Reviewer: [Kim Dohan \(Seoul\)](#)**MSC:**

- [46F12](#) Integral transforms in distribution spaces
- [42B05](#) Fourier series and coefficients in several variables
- [44A40](#) Calculus of Mikusiński and other operational calculi

[Cited in 3 Documents](#)**Keywords:**[Boehmian](#); [Fourier transform](#); [distribution](#)**Full Text:** [DOI](#)