Info

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Fourier transform of distributions on S^1

Fourier transform of distributions on S^1 is onto the space of $\mathbb{Z}$-sequences of *polynomial growth*

$$\widehat{\ }: \mathcal{C}^\infty(S^1)^\star \cong \left\{a \in \mathbb{C}^{\mathbb{Z}} \middle| \exists N : |a_\bullet| \lesssim (1+|\bullet|)^N \text{ on } \mathbb{Z}\right\}$$

Current note has 0 direct children and 0 total descendants.

- stamp stamp
  - Rf subobjects of and functions on $\mathbb{R}^n, T^n, S^n, \mathbb{C}^n$
    - Fourier
      - S1 dist Fourier transform of distributions on S^1

And it has 10 siblings.

- stamp stamp
  - Rf subobjects of and functions on $\mathbb{R}^n, T^n, S^n, \mathbb{C}^n$
    - Fourier
      - L2 bdint Fourier transform on $L^2(-A, A) \leq L^2(\mathbb{R})$
      - L2 Rpos to Hardy2 upper 1 $\widehat{\ }: L^2(0,\infty) \cong_{\text{Hilb}} \mathscr{O}^2(H^2_{\text{U}})$
      - Rn Fourier transform on $\mathbb{R}^n$
      - S1 Fourier transform on S^1, Fourier series on $[0,1]$
      - S1 abs Functions on S^1 with absolutely converging Fourier series, $\check{l}^1(S^1)$
      - S1 dist Fourier transform of distributions on S^1
      - S1 L1toC0 $\widehat{\ }: L^1[0,1] \to \mathcal{C}_0(\mathbb{Z}, \mathbb{C})$
      - S1 L2tol2 $\widehat{\ }: L^2[0,1] \cong_{\text{Hilb}} l^2(\mathbb{Z}, \mathbb{C})$
      - subsets Fourier transform of measurable subsets

- unsharp Unsharpness principles