

Info

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is written (completely with human hands) by [Rupadarshi Ray](#),
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Continuous functions on \mathbb{R}^d

$d = 1$

- [Types of discontinuities of functions on \$\mathbb{R}\$](#)
 - [Intermedia value property of continuous functions on intervals](#)
 - **Definition.** The space of all continuous functions $[0, 1] \rightarrow \mathbb{R}$
 $(\mathcal{C}^0[0, 1], \|\cdot\|_\infty)$
is a commutative \mathbb{R} -Banach algebra by pointwise addition and multiplication, with 1.
 - [Fixed points of functions \$\mathbb{R} \rightarrow \mathbb{R}\$](#)
 - [Continuous functions on \$\mathbb{R}\$ with infinite limit are uniformly continuous](#)
-

Current note has 5 direct children and 7 total descendants.

- [stamp](#) stamp
 - [Rf](#) subobjects of and functions on $\mathbb{R}^n, T^n, S^n, \mathbb{C}^n$
 - [cont](#) Continuous functions on \mathbb{R}^d
 - [0to1 w bd](#) $\mathcal{C}_0[0, 1]$
 - [1with inf limit is unif](#) Continuous functions on \mathbb{R} with infinite limit are uniformly continuous
 - [interm](#) Intermedia value property of continuous functions on intervals
 - [space](#) $\mathcal{C}(U, X)$
 - [space cpt](#) $\mathcal{C}[0, 1]$
 - [dual](#) Dual space of $\mathcal{C}[0, 1]$
 - [int to R](#) Riemann integral functional $\int_{[a,b]} : \mathcal{C}[a, b] \rightarrow \mathbb{R}$

And it has 36 siblings.

- [stamp](#) stamp
 - [Rf](#) subobjects of and functions on $\mathbb{R}^n, T^n, S^n, \mathbb{C}^n$
 - [1Hol](#) Holomorphic functions on spaces over \mathbb{C} of dimension 1
 - [circle packing](#) Circle packing on \mathbb{R}^2
 - [circle packing to Riemann map](#) Circle packing converges to the Riemann biholomorphism
 - [Cn conn open bounded](#) Bounded connected open subsets of \mathbb{C}^n
 - [Cn conn open circular](#) Connected circular open subsets of \mathbb{C}^n
 - [cont](#) Continuous functions on \mathbb{R}^d
 - [cube dyadic](#) Dyadic cubes
 - [curves](#) Curves
 - [derivative](#) Differentiable functions
 - [forms](#) Differential forms on \mathbb{R}^n
 - [Fourier-Wigner](#) Fourier-Wigner transform
 - [harmonic composed conformal](#) Harmonic functions composed with conformal maps
 - [Hilbert](#) Hilbert transform
 - [hol harmonic disk-circle](#) Fourier-Cauchy-Poisson correspondence of holomorphic and harmonic functions on the unit disk and their boundary values
 - [Hol sets](#) Holomorphic subsets of \mathbb{C}^n
 - [hypersurf 2n reg](#) Regular hypersurfaces in \mathbb{R}^{2n}
 - [hypersurf or](#) Orientable hypersurfaces in \mathbb{R}^n
 - [KG](#)

$$\partial_t^2 + \sum_{i=1}^n v_i^2 \partial_{x_i}^2 + m^2$$

- [Laplace](#) Laplace operator on \mathbb{R}^n
- [Lmeas](#) Lebesgue measurable subsets of and functions on \mathbb{R}^n, T^n, S^n
- [Lmeas bd of open](#) Lebesgue measure of boundary of open sets in \mathbb{R}^n
- [met density](#) Metric density of subsets of \mathbb{R}^n
- [Mobius n-sphere](#) Mobius endomorphisms
- [monotone](#) Monotone functions on \mathbb{R}
- [periodic int Cauchy](#) Cauchy integral of periodic functions
- [poly int](#) Polygons with integer vertices
- [R 2 open smooth End](#) Open smooth maps $U \subseteq \mathbb{R}^2 \rightarrow \mathbb{C}$
- [R n discrete subg](#) Discrete subgroups of \mathbb{R}^n
- [R n discrete subg cocpt](#) Discrete cocompact subgroups of \mathbb{R}^n , flat tori

- [RC ramified germs](#) Ramified germs of smooth and holomorphic functions
- [Rn open](#) Open subsets of \mathbb{R}^n
- [Rn open Riem](#) Open subsets of \mathbb{R}^n equipped with the flat metric
- [smooth quasi-analytic](#) Quasi-analytic smooth functions on \mathbb{R}
- [star shaped](#) Star-shaped subsets of \mathbb{R}^n
- [Vec](#) ODEs in $\mathbb{R}^n \leftrightarrow$ Vector fields in \mathbb{R}^n
- [wave](#)

$$\partial_t^2 + \sum_{i=1}^n v_i^2 \partial_{x_i}^2$$