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$$\mathcal{O}(\overline{D})$$

Consider the space of all holomorphic functions defined on some open neighbourhood of  $\overline{D}$

$$\mathcal{O}(\overline{D})$$

We have

$$\mathcal{O}(\overline{D}) \subseteq \mathcal{O}(D) \cap \mathcal{C}(\overline{D})$$

and

$$\mathcal{O}(\overline{D}) \overset{\text{res}}{\longrightarrow} \mathcal{C}^\infty(S^1)$$

Current note has 0 direct children and 0 total descendants.

- [stem](#)
  - [subobjects of and functions on  \$\mathbb{R}^n, S^n, \mathbb{C}^n\$  and its quotients  \$\Gamma \backslash \mathbb{R}^n, \Gamma \backslash \mathbb{C}^n\$](#) 
    - [Holomorphic functions on spaces over  \$\mathbb{C}\$  of dimension 1](#)
      - $\mathcal{O}(D)$
      - $\mathcal{O}(\overline{D})$

And it has 5 siblings.

- [stem](#)
  - [subobjects of and functions on  \$\mathbb{R}^n, S^n, \mathbb{C}^n\$  and its quotients  \$\Gamma \backslash \mathbb{R}^n, \Gamma \backslash \mathbb{C}^n\$](#) 
    - [Holomorphic functions on spaces over  \$\mathbb{C}\$  of dimension 1](#)
      - $\mathcal{O}(D)$ 
        - [Boundary values of  \$\mathcal{O}\(D\)\$](#)
        - $\mathcal{O}(\overline{D})$
        - $\mathcal{O}(D) \cap \mathcal{C}(\overline{D})$
        - $\mathcal{O} \cap L^2(D)$
        - [Reconstructing  \$\mathcal{O}\(D\)\$  from its boundary values](#)