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$\mathcal{O}(S^1)$

Consider the ring

$$\mathbb{C}[z, z^{-1}] \hookrightarrow \mathcal{O}(B_r(S^1)) \overset{\text{res}}{\hookrightarrow} \mathcal{O}(S^1) \hookrightarrow \mathcal{C}^\infty(S^1)$$

The ring is both Noetherian and a UFD. ^[1]

Current note has 0 direct children and 0 total descendants.

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 - $\mathcal{O}(S^1)$
- [stretchy](#)
 - S^1

And it has 19 siblings.

- [stem](#)
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 - $\mathcal{O}(U)$
 - $\mathcal{O}(\mathbb{C})$
 - $\mathcal{O}(D)$
 - $\mathcal{O}^p(H^2_{\mathbb{U}})$
 - $\mathcal{O} \cap L^p$
 - $\mathcal{O}(S^1)$
 - [Zeros and singularities of holomorphic functions](#)

1. [abstract algebra - Is the ring of holomorphic functions on \$S^1\$ Noetherian? - Mathematics Stack Exchange](#) $\leftrightarrow$