Documentation: not an API catalogue

Or, how to do it, how to love it, how to make it better

Mayeul d'Avezac
Default State

- Prioritized last
- An API catalogue, automagically built, with no entry point
- Terse docstrings with no information content
- Out of sync with the code

Aspiration

- Live as we code
- Manuals describing how to use the code, at different levels of details
- Docstrings that demonstrate how to use a function or class
- Always up to date
Bringing documentation forward

```python
def myfunction(aaa, bbb):
    """Lorem ipsum dolor sit amet.
    Consectetur adipiscing elit, sed do eiusmod.
   "
    Tempor incididunt ut labore et
dolore magna aliqua.
    >>> myfunction(aaa, bbb)
    >>> myfunction(0, 0) == 42
    True
    """
    pass
```

- Doctests document usage and are unit-tests
- Jupyter notebooks are manuals and integration tests
- `sphinx.ext.doctest` creates manuals and integration tests
- BDD are tests and how-tos
- And, of course, CI to bring it all together.