



How to build your Fink filter ?

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First steps

- Check the documentation:
https://doc.lsst.fink-broker.org/developers/filter_tutorial/
- Filters are stored here: <https://github.com/astrolabsoftware/fink-filters>
 - There are both ZTF and LSST filters.
- Create an issue in the repo with your needs and your plan for the filter



Based on my experience...

1. Fork the [*fink-filters*](#) repository
2. Create your branch based on your issue number
3. Create the following directory structure:

```
fink_filters/rubin/livestream/filter_<science_case>/  
  __init__.py → empty file  
  filter.py → where will be your cuts
```

4. Write your `filter.py`
 - You can use existing blocks (but also write your own blocks!)
 - Add some unique cuts based on your needs
5. Get data thanks to the [data transfer](#)



Based on my experience...

6. Then you have your first version of the filter and you want to test it:

In your fink-filters repo:

- a. `docker run -t -i --rm -v $PWD:/home/libs/fink-filters
gitlab-registry.in2p3.fr/astrolabsoftware/fink/fink-de
ps-sentinel-rubin:latest bash`
- b. `cd /home/libs/fink-filters/ && pip uninstall -y
fink_filters && pip install -e .`
- c. `python3
fink_filters/rubin/livestream/filter_extragalactic_new
_candidate/filter.py`

7. Submit your filter by creating a pull request linked to your issue !

