Updated on Needlet Estimators

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Status of the Estimator - Today

- Code (python version) already exists and already tested on real data [Planck + Herschel]: https://arxiv.org/abs/1607.05223

- This code calculate the cross-correlation "level" only

- Due to possible future compatibility issues with Euclid archive and, more importantly, for computational reasons, **the existing code is started to be translated in C++** (with some improvements)

- The python code is already tested at zero-order, however could be useful to check the "new" C++ code, when ready, with the zero-order of other groups

Status of the Estimator - Next Steps

- Develop an estimator for some parameters of interest [e.g. neutrino and "dark energy model parameters"]

- This phase of development and test (on real simulation with lensing + neutrino) could be included in a "Standard Project"

Euclid Projects

- Needlets estimator "Standard project": Needlets analysis of CMB lensing-galaxy cross-correlation

- I have simply taken the lensing-g key project of Carlo + Nabila and use Needlets-only

- Key project can be papers with the comparison of different estimators (or methods) developed by the XCMB group

Extra:

- Summary of the EEB document:

- You can sign the paper you work on (the "custodian" of the paper can/must "invite authors" on per-person basis)

- If you have more than 2 Euclid Points in your tracking you can sign Key Project and Flagship papers

- If you have more than 4 Euclid Points you can sign all (including standard project)

- The EEB document is **temporary**, rules can change in the future