Prioritised Science Pipelines Technical Debt

Please use the table below to nominate "technical debt" or longstanding issues which you feel should be prioritised during the F18 development cycle.

Some issues may be well described by a single ticket; if so, feel free just to mention that. Others may need more description — please add a concise summary of the issue, and link to any tickets you're aware of which are relevant.

Add your name to the "nominated by" to express your support for topics which you think are particularly important, even if you didn't originally nominate them. (But note that this is not a popular vote, and we won't necessarily simply address the topics with the most votes first.)

Description	Relevant Jira Tickets	Nominated By
flux->instFlux	⚠ DM-10302 - Jira project doesn't exist or you don't have permission to view it.	John Parejko
Replace Calib with PhotoCalib	⚠ DM-10153 - Jira project doesn't exist or you don't have permission to view it.	John Parejko
Fix sigma/err	⚠ DM-10932 - Jira project doesn't exist or you don't have permission to view it.	John Parejko
Add TAN-SIP fitter to afw and SkyWcs	⚠ DM-13170 - Jira project doesn't exist or you don't have permission to view it. ⚠ DM-14429 - Jira project doesn't exist or you don't have permission to view it.	Russell Owen
Fix bool array handling in PropertySet	⚠ DM-13232 - Jira project doesn't exist or you don't have permission to view it.	Russell Owen
bin/genCameraRepository.py broken in obs_cfht & obs_sdss	⚠ DM-11560 - Jira project doesn't exist or you don't have permission to view it.	Russell Owen
Get rid of all use of astrometry.net in all unit tests except in meas_extensions_astrometry_net		Russell Owen

Stop using astrometry.net by default	⚠ DM-10242 - Jira project doesn't exist or you don't have permission to view it.	Russell Owen
Use MatchPessimisticB by default, after proving its performance is adequate		Russell Owen
ndarray sometimes fails to build	⚠ DM-9677 - Jira project doesn't exist or you don't have permission to view it.	Russell Owen
Modernize pybind11 wrappers for loading speed and fewer circular import issues		Russell Owen
With pybind11 it is easy to make statisticsControl fail badly	⚠ DM-9396 - Jira project doesn't exist or you don't have permission to view it.	Russell Owen
Switch ndarray from a tarball to checked out source	⚠ DM-9396 - Jira project doesn't exist or you don't have permission to view it.	Russell Owen
Change RADECSYS to RADESYS	⚠ DM-6576 - Jira project doesn't exist or you don't have permission to view it.	Russell Owen
DateTime mishandles leap seconds	⚠ DM-7589 - Jira project doesn't exist or you don't have permission to view it.	Russell Owen
Test that measurement plugins get aperture-corrected fluxes	⚠ DM-6070 - Jira project doesn't exist or you don't have permission to view it.	Russell Owen
making PSF candidates should be simpler (this may be obsolete, especially if the code is now in one task; if so, close it)	⚠ DM-5578 - Jira project doesn't exist or you don't have permission to view it.	Russell Owen

SourceDetectionTask can corrupt the image	⚠ DM-4860 - Jira project doesn't exist or you don't have permission to view it.	Russell Owen
Get rid of the pex_policy package		Russell Owen
Change method names in all our tasks and parseAndRun parseAndRunDataRef	⚠ DM-2639 - Jira project doesn't exist or you don't have permission to view it.	Yusra AlSayyad (not sure I'm nominating it, but don't want to forget it)
Fix shbang lines to use python not python2	⚠ DM-13339 - Jira project doesn't exist or you don't have permission to view it.	Russell Owen
Python 3 gives different numerical answers to Python 2	⚠ DM-11779 - Jira project doesn't exist or you don't have permission to view it. ⚠ DM-12180 - Jira project doesn't exist or you don't have permission to view it.	John Swinbank
Modernize use of ndarray in pybind11 wrappers	⚠ DM-14625 - Jira project doesn't exist or you don't have permission to view it. ⚠ DM-11307 - Jira project doesn't exist or you don't have permission to view it.	Russell Owen
Either fix example scripts in **examples/** directories or remove them all together. Broken/outdated examples are potentially dangerous (to newcomers in particular).		Lauren MacArthur