Alert Management, Photometry and Evaluation of Lightcurves (AMPEL)

- AMPEL (v0.6)
  - Live instance processing ZTF alerts at DESY.
  - Reprocess 2018 alerts in <24h, all work in setup.
  - Automatic container creation and execution the next level (NERSC spin?)

- Introductory / reference paper:
  http://www.oir.caltech.edu/twiki_ptf/pub/ZTF/ZtfPapers/ampel_intro.pdf
  - Includes results on ZTF completeness (matched to TNS)

- Starting repository for usage (public):
  https://github.com/AmpelProject/Ampel-contrib-sample

- AMPEL **is** *also* a public broker.

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Have developed a fast, clean stream of public candidates to the TNS (HU+Weizmann)

- The ZTF_AMPEL_MSIP bot (sender)
  - ZTF_Bot1 are manual selection by the RCF group (for classified objects).
- Target objects are new, extragalactic transients suitable for follow-up (m<19.5)
- Partnership controlled high quality candidates to the community
  - Much of the community does not need a broker.
- Does a good job for new SNe: have not yet found an early SN that we did not report.
- Contamination (stars) < ~5%

Future directions:

- Submit more candidates (older, fainter, TDE, AGN…)? More complete but could flood TNS and submits more poor candidates
- Should we submit also bright partnership SNe?

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AMPEL session on Friday. What to do?

- Review of AMPEL
- Hands on with creating channels
- Wishlist for T2/T3 units
- Head to the beach...

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Exciting phase - most of the heavy (core development) lifting completed!