

FLC Analysis (& Polarimetry)

J.List
3.12.2017

Current Activities

- **Strong contributors to ILD Physics WGs, LCC Physics WG and ILC Parameter group**
- papers (since Ploen, w/o proceedings):
 - Implications of the 750 GeV gamma-gamma Resonance as a Case Study for the ILC (arXiv:1607.03829)
 - The Potential of the ILC for Discovering New Particles (arXiv:1702.05333)
 - Improved Formalism for Precision Higgs Coupling Fits (arXiv:1708.08912, submitted to PRD)
 - Physics Case for the 250 GeV Stage of the International Linear Collider (arXiv:1710.07621)
 - The Role of Positron Polarisation at the 250 GeV ILC (arXiv:1712.0wxyz)
- many conference talks / proceedings ...

Person Power

- Postdocs:
 - Y. Wang, S.Kawada: til spring 2019
- PhD:
 - S. Sasikumar til May 2019
 - R. Karl, S. Lehtinen, M. Habermehl (+ M. Chera & S. Caiazza ?!) finish in first half of 2018
- Master:
 - J. Beyer til October 2018

Plans

- Short term (~2018):
 - Write/read/defend ~5 of PhD theses
+ 1 Master thesis
 - Strong contributions to ILD optimisation and new ILD document
 - Strong contributions to ILC documents for European Strategy+ general ILC physics ambulance service
 - small activity in LUXE
 - wait and see what happens in Japan....
- Mid-term, assuming no crystal clear go-ahead for ILC in 2018:
 - extend scope to “Physics at future Colliders”
 - => relation to FCC activities in LHC groups at DESY?
 - e.g. Quantum Universe (if successful?): Future Collider Platform
 - plus local activity, e.g. LUXE