

SEPTA Meeting at Sussex (6 December 2017)

Report of Contributions

Contribution ID: 1

Type: **not specified**

Consortium meeting (Faculty only)

Wednesday, 6 December 2017 12:00 (1 hour)

Contribution ID: 2

Type: **not specified**

A study of diffractive scattering with the ATLAS/ALFA experiment

Wednesday, 6 December 2017 14:10 (25 minutes)

Presenter: LIND, Alexander Pedersen

Contribution ID: 3

Type: **not specified**

WW production with a jet veto made simple(r)

Wednesday, 6 December 2017 14:40 (25 minutes)

Presenter: ARPINO, Luke (University of Sussex)

Contribution ID: 4

Type: **not specified**

Investigating Higgs decays at one-loop in the Standard Model Effective Field Theory

Wednesday, 6 December 2017 15:10 (25 minutes)

We investigate flavour-conserving and flavour-violating Higgs decays at tree-level and at one-loop in the dimension-six SMEFT. We conduct a full NLO calculation for $h \rightarrow b\bar{b}$ and $h \rightarrow \tau^+\tau^-$ in the case of two non-zero Wilson coefficients. Using on-shell renormalisation for the physical parameters and the MS-bar scheme for the chosen Wilson coefficients, divergent bare amplitudes are made finite for real Wilson coefficients in the R- ξ gauge. Simple constraints are then made on the Wilson coefficients and their off-diagonal elements at tree-level. We discuss the validity of the method and its application to Higgs sector measurements at current and future collider experiments.

Presenter: BOLTON, Patrick (University College London)

Contribution ID: 5

Type: **not specified**

QCD corrections in neutrinoless double beta decay

Wednesday, 6 December 2017 16:05 (25 minutes)

Presenter: GONZÁLEZ, Marcela (UTFSM)

Contribution ID: 6

Type: **not specified**

Theoretical Particle Physics: the challenges ahead

Wednesday, 6 December 2017 16:35 (25 minutes)

Presenter: SANZ GONZALEZ, Veronica