

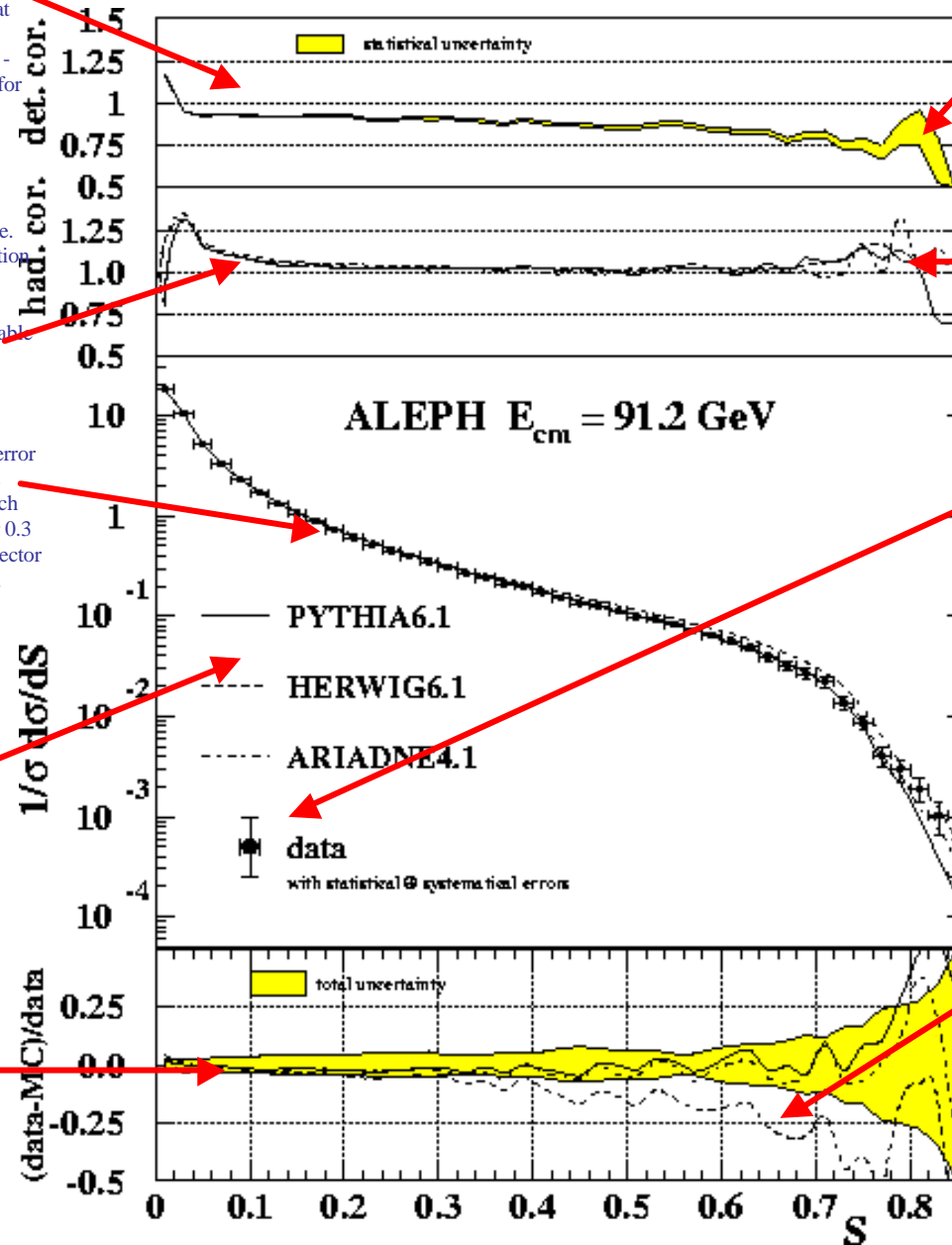
The detector correction is the ratio of the distribution of variable S at hadron level and the distribution at detector level, as calculated with a detector simulation program. This correction is applied bin-by-bin to raw-data distribution in order to correct for acceptance, resolution and undetected particles (e.g. neutrinos).

The hadronisation correction is the ratio of distributions at hadron level and at parton level, i.e. after and before hadronisation. Hence, this correction is only needed when comparison is made with perturbative predictions, for example the determination of α_s . The measurement of the variable itself is not concerned by this correction.

The measurement of the observable (often the distribution of a variable) is shown as point with error bars. It is corrected for detector imperfections and represent the hadron level, i.e. a measurement which would include all 'stable' particles (lifetime larger 0.3 ns), both charged and neutrals, and neutrinos. Detector distributions are obtained with charged tracks and neutral calorimeter clusters, hence corrections are generally small.

Three different generator predictions are shown for the hadron level. All of them have been tuned to describe a general set of QCD observables. Deviations from the present measurement are best viewed below.

The relative difference between the measurement (data) and the hadron level prediction (MC). The band represents the total uncertainty of the relative difference, which includes systematic and statistical uncertainties of the data and statistical uncertainties of the MC.



The error band represents the statistical uncertainty of the detector correction factor, which is obtained with about 5 million simulated events.

The corrections were obtained with 30 Million events for each model, the Statistical uncertainties are very small and are not shown.

The error bar shows the quadratic sum of systematic and statistical uncertainties, which are dominated by the systematic component. Note that and inner error bar, barely visible, stands for the purely statistical component.

The measurement was obtained with 1 million hadronic events.

The statistical uncertainty of the generator predictions is small and not shown.

The most important component of the total uncertainty stems from the choice of the generator used to calculate the detector corrections. This is in turn related to the fact that though the generators predict globally well the observables, some deviations from data are evident, at least in some specific Region of phase space.