

GDR-Inf "Hand's On" project:

Combination and interpretation of experimental results

Meeting #2, 9/10/2020

General points to be addressed

- Techniques to exchange large amount of information, beyond a central value and uncertainty
- Statistical issues that could be improved
- Model dependence of experimental analyses
- Theory (SM/BSM) dependence of experimental analyses
- Consistency of similar measurements among different experiments
- ...

Examples:

- Combination of results w/ different experimental layouts
 - Angular observables w/ different binning scheme
 - Results w/ different phase space coverage
- Update of results when external inputs that are updated, e.g.
 - LHCb $BR(B \rightarrow \mu\mu)$ using average of 2 normalisation modes
 - LHCb R_{pK}
(Justine's examples, see Jérôme's slides)
- Data recasting
 - Accounting for the muon mass at low q^2 in $b \rightarrow sll$ measurements
(see Jérôme's slides)
 - Limit on $BR(B \rightarrow K^* \tau \mu)$ for specific models (see Francesco's slides)
- ... Suggestions ?