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One of the **goals of our Strong-2020** network:

Improvement of the theoretical interpretation of heavy ion data

10 months of postdoc (5 months theory, 5 months experiment)

Inquiry of theoretical and experimental groups: **RIVET may be a good starting point**
(although originally designed for pp collision)

Goal of today's workshop

- ❑ **Establish connection** between RIVET development groups and possible users in theory
- ❑ Presentation of the **planning/ideas of the RIVET development groups** for heavy ions
- ❑ Discussion of the **place of the theory groups** in this development
 - mutual profit
 - credit for the theoretical work
 - support for development
- ❑ How to adapt **RIVET for heavy ion collisions**
 - on which level we want to compare data?
 - Is it really meaningful to have a complicated program which makes the same cut we use anyway or do we want to have a more profound approach ?
(weak decay reconstruction, double hits, resonance decay...)
- ❑ How to deal with **preliminary data**? Scientific discussions (conferences, proceedings etc) are based on new preliminary data. Does it make sense to analyze by RIVET a long time later only for the records?
- ❑ How to assure quality control?
 - theoretical models have parameters and complicated input files
 - C++ files can be modified

- ❑ How to deal with **models not adapted for RIVET**?
- ❑ It is good that models are compared to experiments but **models need also experimental data** to develop further the theory (because many processes are still unknown).
How RIVET can be used for this?

Besides these general considerations there are also technical issues:

We should discuss:

- ❑ What **information** does the codes have to /can provide (disc space, running time)?
- ❑ How to **model centrality dependence and/or collective variables** using only physical observables (and no models)?
- ❑ How to deal with **experimental extrapolations**
(for example: y -distribution based on integration of a (only partially measured) p_t distribution)?

This is just the first round of discussion.

Many of these questions need probably a longer discussion/reflection

We hope very much that we can continue by **meeting in person to settle these issues.**