

The background of the slide is a light gray gradient. It is decorated with several realistic water droplets of various sizes and shapes, scattered across the top and bottom edges. The droplets have highlights and shadows, giving them a three-dimensional appearance.

# DISCUSSION

# WORK PLAN - 1

- **ONGOING ACTIVITIES**
- DOCUMENTATION OF PHYSICS LISTS(~ALL)
- RELEASE, CANDIDATE AND REFERENCE TAG TESTING FOR PHYSICS PERFORMANCE ON GRID (ALBERTO, DMITRI, GEORGE, WITOLD)
- MAINTAIN PHYSICS LIST LEVEL TEST AND MONITOR MODEL PERFORMANCE (JULIA)
- PHYSICS VALIDATION AND GRID (KIHYEON, SOONWOOK, SANG WAN)
- MAINTAIN PHYSICS CONSTRUCTORS AND PHYSICS LISTS (MANY.., PUT YOUR NAME PLEASE)
- MAINTAIN AND FURTHER DEVELOP VALIDATIONS FOR SATIF AND RELEATED FIELDS (TATSUMI)
- COLLECTING AND EVALUATE EXPERIMENTAL DATASETS (HANS, JULIA, KRZYSZTOF, ROBERT)
- SUPPORT FOR CHANGES OF MODEL PARAMETERS (HANS, JULIA, KRZYSZTOF, ROBERT)

# WORK PLAN - 2

- DEVELOPMENT
  - DEFINE MT CLEANUP STRATEGY FOR BUILDERS AND PHYSICS PROCESSES IN MT MODE (ANDREA)
  - COMPLETE SET-UP FOR REGRESSION TESTING FOR MAIN PHYSICS MODELS WITH UPLOAD OF RESULTS TO DATABASE (ANDREA, HANS, JULIA)
    - CREATE SET-UP TO RUN REGRESSION TESTING AT PROCESS LEVEL AT KISTI (ANDREA, WITH HELP FROM KISTI)

# PHYSICS LISTS FACTORIES

- EVALUATE THE MERGING EXISTING FACTORY G4GENERICPHYSICSLIST AND NEW G4ALT::G4PHYSLISTFACTORY (ROBERT H.)
- EVALUATE TO REPLACE G4PHYSLISTFACTORY WITH NEW G4ALT::G4PHYSLISTFACTORY (ANDREA, GUNTER)
- COMPLETE STANDALONE PLFACTORY TESTS IN TEST38 - (ROBERT H.)
  - NEED TO ADD TESTING FOR WINDOWS

# DOCUMENTATION STATUS AND PLANS

- PRODUCE GRAPHS SHOWING OVERLAP OF MODELS (CURRENTLY DONE BY HAND), VERY USEFUL AS A SIMPLE GRAPH FOR NEW USERS (ANDREA)
- COMPLETE AUTOMATED PHYSICS LIST DOCUMENTATION (DENNIS,GUNTER)
- INTEGRATE GENERATED DOCUMENTATION IN WEB DOCUMENTATION(ALEX, DENNIS, GUNTER)
- COMPLETE INVENTORY OF EXISTING WEB-BASED DOCUMENTATION ON PHYSICS LISTS(MANUALS, WEB PAGES, ETC.) (JULIA)
- START PLANNING HOW TO CONSOLIDATE WEB-BASED DOCUMENTATION (JULIA, GUNTER, ALEX)

# DOCUMENTATION

- MICHEL MAIRE: I had some difficulties to find informations on physics constructors. I found nothing in Applications Developers Guide or Physics Reference Manual.  
For example, in hadron\_elastic : what is ChargeExchange, LEND, XS , Delastic, Helastic ?  
in hadron\_inelastic : HP, PHP, QBBC, Shielding ?  
in ions : QMD ? What is the difference between G4IonPhysics and G4IonBinaryCascadePhysics ?  
... etc ...

May I suggest to have a Readme in each subdirectory of /constructors/, containing a short 'definition' of each file in it.

# VALIDATION DATABASE AND WEB APPLICATION

- EXTEND CAPABILITIES OF VALIDATION DB WEB INTERFACE (HANS WITH FEEDBACK FROM COLLABORATION OR USERS)
- FURTHER DEVELOP ARTG4TK FRAMEWORK TO STUDY EXPERIMENTAL OBSERVABLES (HANS)
  - ARTG4TK WAS USED TO RUN THE VALIDATION TEST AGAINST THE FRANZ DATA AND PION AND KAON CROSS SECTION MEASUREMENTS.
  - USE A MODIFIED ARTG4TK TO STUDY THE PARAMETERS OF THE BERTINI CASCADE (JULIA).
- EXTEND SET OF EXPERIMENTAL DATA USED IN VALIDATION, ALLOW TO COMBINE COMPATIBLE DATA SETS (HANS, WITH FEEDBACK ON DATASETS IN USE)
- PROVIDE NEW UPLOAD OF HISTOGRAMS (FROM SIMULATION) (HANS AND ANDREA)
- REVISE SCHEMA OF VALIDATION DB (DMITRI, HANS)
- FILL THE DATABASE UNDER THE NEW SCHEMA WITH EXPERIMENTAL DATA AND EXISTING VALIDATION RESULTS (DMITRI, HANS)
- REPLICATION OF VALIDATION DB AT CERN (DMITRI, HANS)

# OTHER

- FUTURE OF PL INFRASTRUCTURE.
  - WHAT ARE THE LONG/MEDIUM TERM PLANS?
- REMOVE THE TEMPLATE STUFF,
- REMOVE DUPLICATIONS,
- PROPOSE UI COMMANDS TO CHANGE E.G. MODEL TRANSITION REGIONS