

# I/O and TTree

- 3 sets of enhancements
  - Features
  - Stability/Robustness
  - Performance

# I/O and TTree

- Features:
  - Memberwise streaming by default *[2 weeks]*
    - require testing the ability to read the new files with v5.22
  - 2nd revision of data model evolution *[6 weeks]*
    - Fixing issues with class 'renaming' in complex split TTree).
  - Parallel file merger in collaboration with Proof *[4 weeks]*
  - Implement merging of TTreeIndex during CloneTree *[2 weeks]*
  - Upgrade to SetAddress to support being passed an object. *[1 week]*
  - MakeClass improvement: generate includes when necessary. *[2 weeks]*
  - Discuss redesign TFormula/TTTreeFormula using LLVM

# I/O and TTree

- Stability/robustness:
  - Fix LCIO issues with splitting vector of pointers *[2 weeks]*
  - Improve MakeProject (memory leaks, keep up with the experiment data model) *[4 weeks]*
  - Fix coverity report about ShowMember *[3 weeks]*
  - Fix the problem with Cloning a TTree pointing at an 'evolved' StreamerInfo ... *[3 weeks]*
  - Record typedef in root files *[2 weeks]*
  - Thread safety of TClass/TStreamerInfo creations
    - Current show stopper is the fact that a StreamerInfo can be optimized or not).
    - *[ At least 3 weeks but can/will be decomposed ]*

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- Performance:
  - Improve STL performance *[6 weeks]*
    - remove virtuality problem with CollectionProxy, make sure 'reserve' is used for std::vector
  - Improve algorithm to detect in TTree when to use MapObject or not. *[1/2 week]*
  - Implement memory pools (Rene) *[6 weeks]*