

# ROOT streaming don'ts

- **enums: their physical layout might change with adding elements; use int**
- **unions: rootcint bugs revealed by rootclang**
- **bit packing: layout not well defined, overflow; use manual packing**
- **C arrays: hard to increase**

# Offline ROOT streaming

- **“rule of three”**: for consistency every data member should probably appear in three places: Framework, EventIO, ADST
- **completely rewritten 2 years ago**
- **synced at the time**
- **they need constant syncing: MD, RD, SSD**