

# PPP News

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# Nested Parallelism in TDF: Issue

- TDF creates work items
- TTProcessorMT hands them over to TBB via TThreadExecutor
- A TDF work item can spawn tasks (i.e. via FlushBasket)
- TDF task interrupted, a new work item stolen from another work queue by TBB
- “Task Safety” issue

# Nested Parallelism in TDF: Solution

- In 6.10/04
- Disable parallelism for the trees being treated (leave only TDF parallelism active)

We need more, we want nested parallelism, we target extreme architectures (e.g. KNL)

Work items identified:

- Task-safe processing index assignment: DONE
  - Easiest part
- Task-safe handling of files and trees: DONE (PR 828)
- Task-safe handling of TTreeReaderValues : **PENDING**
  - Interrupted task, new task starts. It needs new TTreeReaderValues, “task-local ones” (now they are thread-local)