CW Stack slide proposal

• Mendell/Landry at LHO to code stack slide algorithm based on Brady/Creighton gr-qc/9812014
• We are in the very preliminary stages of this project, trying to answer questions like
  – Is anyone else planning on working on this (emailed Creighton/Brady/Riles/Chin)?
  – Is there any known problem with stack slide? Is Hough all we need?
  – Do we need to modify B/C algorithm? Stack slide SFTs, DeFTs, or F-stat?
• Algorithm will be coded under LAL, and search run under LDAS
  – Driver code will be available to all (detailed understanding of LDAS not required)
  – Parallel search; exploit ~THz LDAS computing power
  – Efficient I/O of SFTs, results database (or frame output) inherent in LDAS
• We will have a more complete proposal/progress report at the June F2F
• Code written and working by the August LSC meeting
Brady/Creighton algorithm and potential modifications

The algorithm shown in the Flowchart is iterated in a hierarchical approach

Resample?
Or use SFTs, DeFTs, F-stat
From LALDemod