

# ShowRec

Manual  
V0.1

As of 03.01.2011

[frank.meisel@lhep.unibe.ch](mailto:frank.meisel@lhep.unibe.ch)

```
frank@lhepla28:\ w$ ShowRec
vt++ version /1-35 loaded (Fri Jan 18 14:33:54 2002).
libEmath      loaded...
```

```
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--- ShowRec ---
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```

```
--- Usage: ShowRec -FP -LP -MP -NP -PADI -BTPA -BGTP -ALTP -PASTART -PAEND Ink.def ---
```

```
---      :      -FP      FirstPlate      (1..56..)
---      :      -LP      LastPlate      (2..57..)
---      :      -MP      MiddlePlate      (FP..LP..)
---      :      -NP      NumberofPlates      (1..56..)
---      :      -LT      use LinkedTracks.root (for InBT)      (0,1(1st track), 2(last track),3(all tracks),4(track in [fp,mp]))
---      :      -MC      use only MC -Events (for InBT)      (0,1)
---      :      -VTX      For InBT: Cut to IP for MC vertex (needs BRICK.TreePGunInfo.txt and -MC=1) (0,1:lpcut:100,2:lpcut250)
---      :      -FZHP      use a) firstZ position, b) highest P (MC-Events) & first Z pos. (for InBT) c) highest P (for InBT) (0,1; only with -MC1)
---      :      -FLMC      use only MC Flag (Pdgld)
---      :      -ALI      use gALI either from cp.root file (0) or from LinkedTrack.root(1) or from root file...(2:BTali.root) (3:InTr.ali.root)
---      :      -MIXMC      Extract Subpattern with all MCEvents mixed! --!WARNING!--
---      :      -PADI      ParentDirectory (only for naming the output file)
---      :      -BTPA      BasetrackParametrisation (only for naming the output file)
---      :      -BGTP      BackgroundType (only for naming the output file)
---      :      -ALTP      AlgorhythmType
---      :      :      0:      ReconstructShowers_? (?)..
---      :      :      2:      ReconstructShowers_CA
---      :      :      1:      ReconstructShowers_CL (NOT FINISHED YET, EXPERIMENTAL)
---      :      :      3:      ReconstructShowers_NN
---      :      :      4:      ReconstructShowers_OI
---      :      :      4:      ReconstructShowers_SA (MC Events only)
---      :      :      6:      ReconstructShowers_TC
---      :      :      7:      ReconstructShowers_RC
---      :      :      8:      ReconstructShowers_BW (EXPERIMENTAL, BEST PARAMETERS STILL TO BE SEARCHED)
---      :      :      9:      ReconstructShowers_AG (EXPERIMENTAL, BEST PARAMETERS STILL TO BE SEARCHED)
---      :      -PASTART      ParametersetStart
---      :      -PAEND      ParameterSetEnd
---      :      -CUTTP      Algorithm CutType: 0: standard, 1:high_pur 2: high_eff 3: FJ_HighPur 4: FJ_Standard
---      :      -CLEAN      InputData BG Cleaning: 0: No, 1:20BT/mm2 2: 40BT/mm2 3:10BT/mm2 4:60BT/mm2
---      :      -FILETP      Filetype: Additional (distinguish-) variable to be written into treebranch. (only for naming the output tree)
---      :      -DEBUG      gEDBDEBUGLEVEL (1..5)
---      :      -OUT      OUTPUTLEVEL (1,2,3)
---      :      -STOP      STOPLEVEL (0,1,2,3)
--- Usage: ShowRec -FP1 -LP31 -MP1 -NP30 -FZHP1 -MC1 -ALTP4 -PASTART0 -PAEND0 Ink.def ---
```

```
--- Usage: ShowRec -FP1 -LP31 -MP30 -NP30 -FZHP1 -MC1 -ALTP4 Ink_all.def ---
```

```
--- Usage: ShowRec -FZHP1 -MC1 Ink_all.def ---
```

```
--- Usage: ShowRec -LT1 -MC1 Ink_all.def ---
```

```
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frank@lhepla28:\ w$
```

Important:

ShowRec is just a standalone program  
If you wanna do all in one then better use  
the functions implemented in libShower

# New: Paraset files

- If you want to test different parametersets for the reconstruction (for example change cone radius...) then you can use this method!
  - Link (copy) one of the root-files in paraset/. Into the working directory, but name it as `PARAMETERSET_DEFINITIONFILE.root`
  - Choose the algo matchingly
  - The numberings of paraset and paranumbers are listed in the corresponding txt file!