

NuBeamWeights Package

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NuBeamWeights

- Same thing as the “SKZP” package I talked about last time.
- Uploaded to CVS:
 - `addpkg -h NuBeamWeights`
- Main class is called “skzpReweight”
- Uses files in `/nova/data/flux/SKZPdata/`
- I will start editing the package wiki

skzpReweight

- Two main weights: Fluk and Beam
- `GetWeight()` returns $\text{GetFlukWeight} * \text{GetBeamWeight}$
- Each weight function is configured from fit parameters and a ROOT file; used to give a weight for each specific event
- Constructor works with default inputs
 - Can also specify parameters `fPar` and `fBPar`, paths to different ROOT files `fFpath` and `fBpath`, `fBflag` for histogram name-format information.

SkzpReweight (cont.)

- GetFlukWeight returns weight based on hadron production parameters
 - Passes parameters tptype, tpt, and tpz; or will extract them from MCFlux
- GetBeamWeight returns weight bases on beam-focusing parameters
 - passes parameters for neutrino energy, detector, and beam configuration.
 - Considerably more flexible about its input