Philosophy, Principle, and Method for the CombLayer: Day Five

Stuart Ansell

European Spallation Source, Lund, Sweden.

January 7, 2016

Source System

Sources are the worst part of MCNP.

- Source are pre-code and then done by keyname type
- Main area is in SourceSelector
- There are a FEW generic sources

Example:

```
1
2    ./ess -r --sdefType help AA
3    ./ess -r --sdefType Beam Mybox back AA
```

Source : Beam source

- Other items are by variable
- Radius :: Radius of beam size
- ASread :: Angular spread
- particleType :: particle

Energy is slightly more complex

- Energy can be a list or a value
- If a list an EProb card can be gives

Example:

```
 5
 6   ./ess -r --sdefType Beam Mybox back \
 7     -v Energy '1e-9 50log 1e9'
 8     -v EProb '0.1 50i 0.9' \
 9     AA
10   ./ess -r --sdefType Beam Mybox back \
11     -v EFile 'InputSpectrum.txt'
12     AA
```