

Background feature in ICOOL

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Fields in ICOOL

at every point code takes superposition of

- **region field**
- **cell field**
- **neighbor fields**
- **background field**

Background field

- idea: construct complicated combinations of built-in ICOOL field shapes
- field build up on 3-D cartesian grid
- uses pseudoregion commands
 BACKGROUND, BFIELD, ENDB
 only works with transverse fields in y direction
 curvature functions derived from B_y
 does 2nd order tracking
- can also use special field type STUS
 user supplied, static magnetic field
 requires ICOOL β version 2.09

Background field specification

- **pseudoregion commands**

- BACKGROUND**

- specify reference momentum**

- specify grid parameters**

- specify interpolation method**

- BFIELD**

- specify location in grid**

- specify region of interest**

- specify field type**

- specify field parameters**

- ENDB**

- stops field definition**

- dump grid field to file**

- **special field type STUS**

- user supplied, static magnetic field**

- specify file number**

- specify field normalization factor**

