

echidna SPEC :: plot\_cylindrical

1. Show Poincare plot in real space (cylindrical or Cartesian), execute VMEC, and other actions.
2. This action is usually initiated by clicking on the `cylindrical Poincare` window.
3. Usually a single Poincaré plot is shown, at an arbitrary toroidal angle, which is incrementally increased/decreased by right/left clicking on the `cylindrical Poincare` window. An exception to this is if `3` is clicked on the `cylindrical Poincare` window, in which case 3 Poincaré plots will be shown at  $\zeta = 0$ ,  $\zeta = \pi/2N$ , and  $\zeta = \pi/N$ , where  $N$  is the field periodicity.
4. The equilibrium information that is plotted is extracted from `ext.end` file via a call to `read_out`.
5. The plot range is adapted to the boundary of the equilibrium, where the boundary is read from `ext.end`. If the `.ext.external.0000` file is present, then SPEC has computed a Poincaré plot external to the plasma boundary (using the virtual casing principle to obtain the field due to the plasma currents). In this case, the Poincaré plot range is adapted to the domain of the `mgrid` file (which was used by SPEC to compute the field due to external coils).
6. If SPEC constructed any irrational surfaces, they will automatically be included.

`plot_cylindrical.pro`

last modified on 2012-06-07 ;