```
2
   #Parameter file for SPINNAKER
   <del>_</del>
3
4
   #Setup of the 2-dimensional grid
   #-----
5
   grid_size = 200#<=400; Number of grip points in z
6
7
   nu_channel = 400#<=400; Number of grid points in frequency
8
   grid_delta = 10#Every x_th grid point is written to output file
9
   z_halo = 8.#Halo size [kpc]
10
   first_data_point_at_0kpc = -1#First data point at z=0 kpc? 1:yes -1: no
   normalize_intensities = -1#At z=0, I(nu_i)=1, 1:yes -1: no
11
12
   #------
13
   #Output
   #-----
14
15
   nu_1 = 1.37e9# [Hz]
16
   nu_2 = 4.86e9# [Hz]
   nu_3 = 6.20e9# [Hz]
17
   nu_4 = 8.40e9# [Hz]
18
   mode = 1#Advection: 1; Diffusion: 2
19
   epsilon = -1#1:write emissivities instead of intensities (only if model=1)
20
21
   #------
   #Setup of the advection and diffusion model
22
   #-----
23
   gamma_in = 2.7#Injection CRe index
24
   rad_field = 0.1#Radiation energy density = U_IRF/U_B
25
26
   V0 = 300.0e5 \#Advection speed [cm s^-1]
   velocity_field = 0#0: constant, -1: power-law, 1: exponential
27
   h_V = 1.#[kpc], V = V0*exp(-z/h_V) \text{ or } V = V0 *(R0/1kpc + z/h_V)^beta
28
   adiabatic_losses = -1#Yes: 1, No: -1 (only for advection)
29
   D0 = 2.0e28#Diffusion coefficient [cm^2 s^-1]
30
31
   mu_diff = 0.5#Energy dependence D=D0*E^mu_diff
   #-----
32
33
   #Magnetic field setup
   #-----
34
35
   galaxy_mode = 1#1: thin and thick disc, -1: piece-wise exponential
   z1 = 10.0#if galaxy_mode=-1, transition from zone 1 to zone 2 [kpc]
36
37
   B0 = 13.5e-6#Magnetic field strength [G], 1mikroGauss=1.0e-10Tesla
38
   B1 = 8.6e-6#Magnetic field strength [G], 1mikroGauss=1.0e-10Tesla
   h_B1 = 0.6#Scaleheight of the B-field in zone 1 [kpc]
39
   h_B2 = 5.0#Scaleheight of the B-field in zone 2 [kpc]
40
   #------
41
   #Use a magnetic field model (needs edit of the source files)
42
   #-----
43
44
   model = -1#-1: no model, 1: model (which needs edit of the source files)
   initialize_model = -1#Initialze magnetic field model
45
46
   model_north = 1#Use northern part of the model
   update_model = -1#Rescale magnetic field model
47
   xi = 3.65#Model normalization
48
   beta = -0.75#Power-law index for the velocity, V = V0 * (R/R0)^-beta
49
   R0 = 1.04e22#Jet radius at the base [cm]
50
   51
```

1