CermitESR_b0frfLoop(B0_loop, B1, cantilever, f_rf_loop, grid, h, magnet,
mw_x_0p, sample)
returns: df_spin
collection: CermitESR
graph: CermitESR_graph
handler: MemHandler
components:
- magnet: ['Bz_method', 'Bzx_method', 'Bzxx_method']
- sample: ['J', 'Gamma', 'spin_density', 'temperature', 'dB_sat', 'dB_hom']
- grid: ['grid_array', ['grid_shape', 'shape'], ['grid_step', 'step'], [...]]
- cantilever: ['k2f_modulated']

CERMIT ESR experiment for a large tip.

```
grid extended

extend_grid(extend_grid_by_length, mw_x_0p)
return: ext_grid
functype: function
```

ext_grid

```
Bz extended

field_func(Bz_method, ext_grid, h)
return: ext_Bz
functype: function

Calculate the field value at the given height and grid points.
```

```
x_0p window pts

convert_grid_pts(mw_x_0p, grid_step)
return: ext_pts
functype: function

Convert distance to ext points.
```

```
Bzxx

field_func(Bzxx_method, grid_array, h)
return: Bzxx
functype: function

Calculate the field value at the given height and grid points.
```

ext_Bz   ext_pts   Bzxx

```
subnode_B0

submodel_B0(B0_loop, B1, Bzxx, Gamma, J, dB_hom, dB_sat, ext_Bz, ext_pts,
f_rf_loop, grid_shape, grid_voxel, k2f_modulated, spin_density, temperature)
return: df_spin
functype: mrfmsim.model.Experiment
modifiers:
- loop_input('B0')

Submodel generated by loop_shortcut for parameter 'B0'.
```