

project_parameters

Initialize:
trap.SystemInformation
trap.Configuration
trap.Instance

import_data

Convert BEM text files to
Simulation.EL_xx
Simulation.X etc.
'trap' is not modified

get_trapping_field

Create
trap.Simulation
by joining appropriate
'Simulation'
files created above

expand_field

Create
trap.Configuration.multipoleCoefficients
Regenerate electrode potentials from
Spherical harmonic expansion, if required

trap_knobs

Create
trap.Configuration.multipoleControls
trap.Configuration.multipoleKernel

set_voltages

Set trap voltages for particular instance
trap.Instance.dcVoltages
trap.Instance.U_DC_in (input multipoles)
trap.Instance.E_in (input electric field)

post_process_trap

Analyze trap potential.
Determine depth, frequencies,
trap compensation parameters,
output multipoles. Update trap.Instance

