CermitESR(B0, B1, cantilever, f rf, grid, h, magnet, mw x 0p, sample) returns: df spin group: CermitESRGroup graph: CermitESR_graph handler: MemHandler CERMIT ESR experiment for a large tip. grid extended extend grid by length x(extend grid by length, mw x 0p) return: ext_grid functype: function Extend the grid by the given length in x. 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. ext Bz B tot extended add(ext Bz, B0) return: ext B tot functype: builtin_function_or_method ext B tot Calculate combined magnetic field extended. ext B tot B offset extended x 0p window pts B tot sliced B offset(ext B tot, f rf, Gamma) slice matrix(ext B tot, grid shape) convert grid pts(mw x 0p, grid step) return: ext B offset return: ext pts return: B tot functype: numba.core.registry.CPUDispatcher functype: function functype: function Calculate the resonance offset. Convert distance to ext points. Calculate combined magnetic field. ext B offset B_tot ext_pts_ minimum absolute x offset mz_eq min abs offset(ext B offset, ext pts) mz eg(B tot, Gamma, J, temperature) return: B offset return: mz eq functype: function functype: numba.core.registry.CPUDispatcher Minimum absolute value of a matrix in x direction based on the window. Magnetization per spin at the thermal equilibrium using the Brillouin function. B offset rel dpol sat Bzxx rel dpol sat steadystate(B offset, B1, dB sat, dB hom) field func(Bzxx method, grid array, h) mz_eq return: rel dpol return: Bzxx functype: function functype: numba.core.registry.CPUDispatcher Relative change in polarization for steady-state. Calculate the field value at the given height and grid points. Bzxx rel dpol spring constant shift neg sum of product(Bzxx, rel dpol, mz eq, spin density, grid voxel) return: dk spin functype: <u>function</u> Calculate dk_spin account for the negative sign in the approximation. dk_spin_ frequency shift mul(dk_spin, k2f_modulated) return: df spin functype: builtin function or method Convert the spring constant shift to frequency shift.