

```
get_qlist_nova_class.get_qlist
DAT
fhwParam : str
dataset : dict
ene : ndarray
fig : None Type
pkfile : None Type
save_file : None Type
spectra : ndarray

create_fig()
getXYZ(x, y, z, xb, yb)
get_all_data()
get_all_data2()
get_all_data3()
get_all_monidata()
get_all_sdata()
get_data()
get_intdtype(maxnumber)
get_sdata()
init_eca()
init_ecm()
loadDAT()
loadDAT()
plot_sub(X, Y, Z, axindx, vmax)
qem ap(qmin, qmax)
read_pkl()
run_moni()
save DAT()
save_hdf5()
save_pkl()
save_spectra(spectrafile, old)
spect(qmin, qmax, dataset, isplot)
spect2(qmin, qmax, dataset, isplot)
spect3(qmin, qmax, dataset, isplot)
spectm(qmin, qmax, dataset)
```

```
get_resampled_data_org_class.Sget_qlist
DAT
EC
intensity : ndarray
pkfile : None Type
save_file : None Type
spectrab : ndarray

get_all_sdata(DATQE)
get_frac_TimeParam(TimeParam, frac)
get_org_data(binw, runNo, TimeParam, frac)
get_org_intensity_array()
get_org_spectra(qmin, qmax)
get_qem ap(qmin, qmax)
load_pkl()
save_pkl()
```

```
qens_fit_class.qens_fit
bg : float
devf
elim : None Type
gamma
k
leastsq : bool
ml
optbgpe akratio
out
quiet : bool
showplot : bool
tf
x_df
x_tf
y_df
y_tf

afteroptimize(out, s_sq, variables, figname)
check_generated_samples(x, data)
check_spectra()
checkdata()
convlore(f, gamma, x)
convloreorg(f, gamma, x)
correction()
decorrection()
fun_lore(x, gamma)
generate_data(devf, itf, check, rebin)
get_data(infile)
get_hdata(infile)
get_icorrdata(icorrfile)
get_idata(infile)
get_sdata(infile)
icorr()
interpolate()
kde_hist(kvvariables, hvvariables)
kde_hist_sub(tf, devf, kde, variables)
limit(x, y, margin)
limit2(x, y, elim)
multitf(devf, itf)
optimize(variables, figname)
preprocess(doicorr)
preprocessh(doicorr)
preprocessnoi(doicorr)
preprocesss(doicorr)
rebin_generated_samples(x, data, num, shift)
reconstruct(elim, check, idevf, itf)
res(coeff, x, d, t)
res_icorr(coeff, x, t)
save_generated_data(x, data, savefile)
save_result()
testconv()
```

```
qens_class_for_mpi.qens
M : int
WinFunc : str
datadir
dataset
de
figname : str
odata : bool
qsel : bool
quiet : bool
save_file
selected_energy
selected_spectra : ndarray
shift
showplot : bool
tin
tin_real : ndarray
winparam : int
xvec : ndarray
xvec_real : ndarray
y : tuple
y_ : tuple

add_shift()
add_shift_de()
calc_sskernel_f90()
calc_sskernel_f90(WinFuncNo)
get_xvec()
plotter()
run_sskernel(num)
save_output(output_file)
save_outputs(output_file)
select_spectra()
```

```
qens_fit_class_hist_noidata.runhistnoidata
alpha
devf
elim
elimw
leastsq : bool
ml
numcycle : int
outall : list
outfile
tf
x
yd

check_out(cyidx, out)
correctio(x, yd, yt)
cycle()
decorrection(x, yd, yt)
generate_data(idata)
get_xmlyd()
loadfile()
modify_out(cyidx, out)
optimize(x, yd, yt, variables)
output()
plot_distribution(binwidth1, binwidth2)
plot_distribution_single(binwidth1, show)
preprocess()
reconstruct(x, yd, out)
res(coeff, x, d, t)
savefile()
```

```
get_resampled_data_class.Sget_qlist
DATB
DATBQE
DATQE
dataset : dict
pkfile : None Type
save_file : None Type
spectrab : ndarray

get_all_sdata()
get_all_sdata()
get_boot_strap_sampled_spectra(abs, qmin, qmax, seed, restart, wnocorr, frac)
get_qem ap(intensityb)
```

```
get_resampled_data_mpi_class.Sget_qlist
pkfile : None Type
save_file : None Type
spectrab : ndarray

get_boot_strap_sampled_spectra(abs, qmin, qmax, seed, wnocorr, frac)
```

```
qens_fit_class_kde.runkdenoidata
M : int
WinFunc : str
alpha
de
devf
dt
elim
elimw
leastsq : bool
ml
numcycle : int
outall : list
outfile
rank
selected_energy
selected_spectra
tf
tin
tin_real : ndarray
winparam : int
x
y : tuple
y_hist
yd

Gauss(x, w)
baloon_estimator()
cycle()
get_xmlyd()
hist()
kde(x, y, num)
kde_baloon(x, y)
preprocess()
run_sskernel_notused()
```

qens_kde_resampled.qens_kde_resampled
pkfile

```
qens_balloon_resample_class.Sqens_balloon_resamples
Nb : int
bg : float
comm
elim : list
gammaas : ndarray
ishist : bool
leastsq : bool
num : int
odata : bool
orgfiles : list
orgmodifier : str
outall : list, ndarray
pkfile
prefix : str
quiet : bool
rank
rfiles : list
rsm modifier : str
runNos : list
size
variables : list
y : str

Cl_of_intensities()
Calc BandW(orgfile, inb)
DefineFiles()
DoQf(inb)
DoQfio(inb)
Gauss(x, w)
balloon(ky, sy)
check_idata()
eachrunno(fid, inb)
eachrunno_io(fid, inb)
getspectra(rfile, inb)
io(kyo, kyi)
run()
run_eackkde()
run_eackkde_io()
run_io()
```

```
qens_balloon_resample_class.qens_balloon_resamples
Nb : int
bg : float
bins : ndarray
comm
elim : list
gammaas : ndarray
ishist : bool
leastsq : bool
num : int
orgmodifier : str
prefix : str
qidix : bool
quiet : bool
rank
rsm modifier : str
runNos : list
size
spectrab
variables : list
y : str

Calc BandW(orgfile, inb)
DoQf(inb)
eachrunno(fid, inb)
getbins()
getspectra(rfile, inb)
optimize(x, yd, yt, et, variables)
rebin(x, y)
rebine(x, e)
res(coeff, x, d, t, e)
```

```
qens_balloon_resample_org_class.qens_org_classm
outall : ndarray, list
outfile : str
qidix

combine_qs()
get_out()
run_for_mqs()
```