1 Introduction

flq_chn is a task of extension level. It calculates the Floquet Chern number. To use this task, you must first perform **flq** first. Most of the keywords are the same with **chn**, so one should reference **chn** for details. Also, the attached output data are not complete because they are too large.

2 Dictionary

2.1 Input

The input parameters of **flq_chn** share exactly the same keywords as **chn**. Therefore, one can directly reference the dictionary of **chn**

2.2 Output

flq_chn.gap_ind This variable gives the location of the band and its band gap. Since Floquet problem has no Fermi level, one can only discuss the Chern number of a particular band gap. This variable gives three column. The first two give the band indies where gap appears and the last one gives its gap energy.

The other output data are the same with **chn**. One should reference **chn** for details.

```
flq_chn.Mesh=[10,10];                         // k-space mesh
flq_chn.DiffVal=[10^-4];                      // small value of DiffVec
flq_chn.DiffVec=[1,1];                        // differential vector
============= PiLib Variable =============
flq_chn.gap_ind, @full, [band_ind1, band_ind2, gap_value]
ORDER=    0, SIZE=[    1,    3], TYPE=REAL

          1           2           3

   1.000000    2.000000    4.317732

============= PiLib Variable =============
flq_chn.ban_Chern, @full, Chern number of each band
ORDER=    0, SIZE=[    2,    1], TYPE=REAL

          1

   1.000000
  -1.000000

============= PiLib Variable =============
flq_chn.lat_field, @full, lattice field of each band at each k-point
ORDER=   -1, SIZE=[    2,  100], TYPE=REAL
```

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