Examples

Taper

November 19, 2016

Abstract

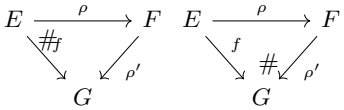
Nothing here.

Contents

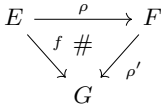
1 Nomenclature

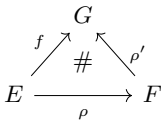
2 Diagram

Bad diagrams



Good diagrams





3 Table

Tentative Schedule:

Table 2: caption

#	Due date
1. Summarise the review paper	December, 2016
2. Learn related mathematical tools (homotopy thoery, group cohomology, etc.)	April, 2017
3. Play with toy models such as the $1D$ quantum walk model	Faburary, 2017
4. Possible research topics:	July, 2017
4.1 classifying topological materials in new symmetry groups, such as the space groups;	As above
4.2 finding new ways to classify in the non-interacting picture;	
4.3 experiment about the effectiveness of existing;	
4.4 explorer approaches to the classification in interacting.	

4 Anchor

References

[1] s

Nomenclature

aa aaa

5 License

Table 1: Classification

Symmetry	*Spatial Dimension*	*Result*	*Other Keywords*
T	0	An intger: the number of particle-occupied Kramers doublet states	
T	1	None	
T	2	$\mathbb{Z}_2$	
T	3	$\mathbb{Z}_2$	$3D$ crystals have additional $3\mathbb{Z}_2$ invariant⇒ "weak topological insulators
Q(?)	2	Characterized by μ in units of e^2/h	TKNN
Q(?)	even d	Topological invariant (k-th Chern number)	
Q(?)	0	number of single-particle states with negative energy ($E < E_F = 0$), which are filled with electrons.	
T& Q			
No T & No Q	0	$\mathbb{Z}_2$	
No T & No Q	1	$\mathbb{Z}_2$	"majorana chain"
No T & No Q	2	Topological number is integer.	Even-odd effects.