

Temp

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Abstract

(Unknown)

Contents

1	Classification of Topological states by Hamiltonian	1
2	Anchor	1
3	License	1

1 Classification of Topological states by Hamiltonian

Table 1: $d = 1$

Class A	$\mathcal{H} =$	Comments
\mathbb{Z} class <i>A</i> III	$(m + \cos k_x)\sigma_z + \sin k_x\sigma_y$	$S = \sigma_x$
0 Class A	$(m + \cos k_x)\sigma_z + \sin k_x\sigma_y$ (SPEMT: $M\sigma_x$)	No symmetries
\mathbb{Z}_2 class <i>D</i>	$(m + \cos k_x)\sigma_z + \sin k_x\sigma_y$	$C = \sigma_x K$ (Particle hole degree of freedom)
\mathbb{Z}_2 class <i>DIII</i>	$(m + \cos k_x)S_0\sigma_z + \sin k_x S_0\sigma_y$	$C = \sigma_x K$ (PH) $T = S_y K$, Spin 1/2
0 class AII	$(m + \cos k_x)S_0\sigma_z + \sin k_x S_0\sigma_y$ SPEMT: $MS_x\sigma_x$	$T = S_y k$ Spin 1/2
\mathbb{Z} class CII	$(m + \cos k_x)S_0\sigma_z + \sin k_x S_0\sigma_y$	$T = S_y K, C = S_y\sigma_x K$

2 Anchor

References

3 License

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