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Tangent fermions: massless fermions on a lattice

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$$E(k) = (2\pi\delta/a) \tan(a k/2)$$

$$\mathcal{H}\Psi = \mathcal{D}E\Psi$$

$$i\tau(\partial_t + v\vec{\sigma}\cdot\vec{\partial})\Psi = \mathcal{H}\Psi$$

$$W = \frac{i}{2\pi} \oint \nabla_k \log(\det U(k)) \cdot dk$$

$$\sigma_z U \sigma_z = U^{-1}$$

$$\mathcal{H} = v\vec{k}\vec{\sigma} + V(\vec{r})$$

$$\mathcal{H} + \mathcal{I} = \mathcal{H} + \mathcal{I}$$

