Gauging Cold Fusion

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Abstract

I am a puzzle website. It takes 2 laws of physics to solve me. [1] helps.

1 Second Derivative

In Figure 1.1,

$$UL = 104V. \tag{1}$$

Then there is a unique solution [2].

1.1 Fusion

I have a simple question
The truth I only ask.
Are all skiers masks
Or do only masks ski?

2 Gauging

The 4D Dirac-Wilson system is first studied in a simplified 2D Gauge Laplacian model [3]. Let
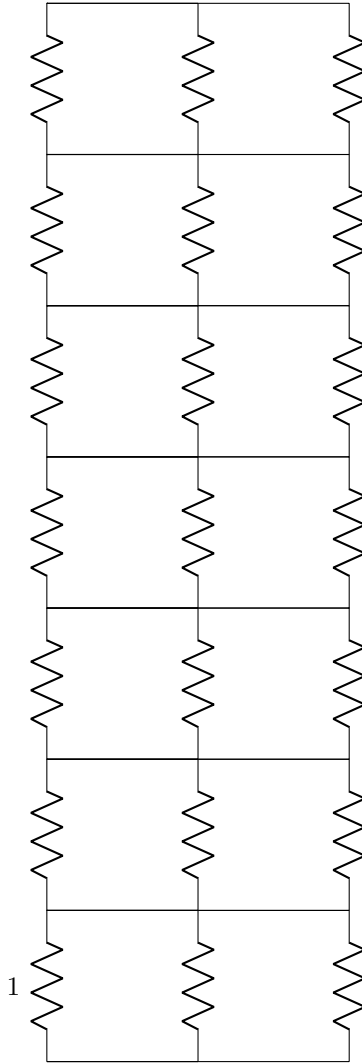
$$
\begin{aligned}
(\nabla_\mu^+ \phi)(x) &= U_\mu(x)\phi(x + e_\mu) - \phi(x) & (2) \\
(\nabla_\mu^- \phi)(x) &= \phi(x) - U_\mu^*(x)\phi(x - e_\mu) & (3)
\end{aligned}
$$

where e_μ is the unit vector in the μ coordinate direction, $\mu = 1, 2$.

$$L = \sum_\mu \left(\nabla_\mu^- - \nabla_\mu^+ \right) + m \tag{4}$$

Assume $U \equiv 1$ everywhere, zero mass and the same (non-periodic) lattice of Fig. 1.1. Therefore we get the same equation system as in the previous section. Repeat the same steps of the previous section's solution with the Clover data instead of amps.txt.

References

[1] Livne, O.E. and Brandt, A., Lean Algebraic Multigrid (LAMG): Fast Graph Laplacian Linear Solver. SIAM Journal on Scientific Computing 34:4, B499-B522, 2012.
    `https://arxiv.org/abs/1108.1310`

[2] Kirchhoff, Gustav. Ueber die Fraunhoferschen Linien. Monatsberichte der Königliche Preussische Akademie der Wissenschaften zu Berlin: 662–665, 1860.

https://goo.gl/5TZzvp

[3] Brannick, J. Multigrid Methods for Lattice QCD. Retrieved on May 14, 2017 from
http://qcdna.yale.edu/sites/default/files/files/brannick$_0$7.pdf