

The Boar's Head Carol

$$1 = C$$

Traditional English Carol

Diagram illustrating the evolution of a 1D spin chain over time steps $t=0$ to $t=7$. The chain is divided into three sections by vertical lines.

Top Row (States):

- $t=0$: 1 1 1 1 1
- $t=1$: 7 1
- $t=2$: 5
- $t=3$: 3 4 4
- $t=4$: 6
- $t=5$: 4 5 5
- $t=6$: 1
- $t=7$: 1

Bottom Row (Mathematical Expressions):

- $t=0$: 1^4
- $t=1$: 6^{-7}
- $t=2$: 2^{-7}
- $t=3$: $3^{-7} \# 1^{07}$
- $t=4$: 2^{-7}
- $t=5$: 5^7
- $t=6$: 1^4
- $t=7$: 1^4

Diagram illustrating the decomposition of the tensor product of two irreducible representations of $SU(4)$ into irreducible representations of $SU(3)$.

The diagram is divided into three sections by vertical lines, showing the decomposition of the tensor product of two irreducible representations of $SU(4)$ into irreducible representations of $SU(3)$.

Section 1 (Left): The tensor product of 4^{47} and 3^{-7} decomposes into 2^{-7} and 5^7 .

Section 2 (Middle): The tensor product of 2^{-7} and 5^7 decomposes into 2^{-7} and 4^4 .

Section 3 (Right): The tensor product of 5^7 and 1^4 decomposes into 5^7 and 1^4 .

1, 2.

1

5 5 5

5^7 1^4

3.

1

5 5

5^7 1^4