

More

$$1 = G$$

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The figure displays four bar charts, each representing the distribution of the number of non-zero entries in the product of two sparse matrices. The x-axis for all charts is the number of non-zero entries, ranging from 0 to 7. The y-axis represents the count of matrices with that many non-zero entries.

- 1⁴ 7:** The distribution is concentrated at 0 and 1 non-zero entries. There are 5 matrices with 0 non-zero entries and 7 matrices with 1 non-zero entry.
- 6⁻⁷:** The distribution is concentrated at 1 and 2 non-zero entries. There are 7 matrices with 1 non-zero entry and 1 matrix with 2 non-zero entries.
- 2⁻⁷:** The distribution is concentrated at 0 and 1 non-zero entries. There are 4 matrices with 0 non-zero entries and 3 matrices with 1 non-zero entry.
- 5⁷:** The distribution is concentrated at 0 and 1 non-zero entries. There are 2 matrices with 0 non-zero entries and 3 matrices with 1 non-zero entry.

Diagram illustrating the evolution of a quantum state over time, showing four stages separated by vertical lines. The state is represented by a horizontal bar divided into segments, with labels indicating the state's configuration at each stage.

- Stage 1 (Left): Labeled 6^- . The bar is divided into segments labeled 1, 7, and 1.
- Stage 2: Labeled 6^{-47} . The bar is divided into segments labeled 2, 1, 1, and 7.
- Stage 3: Labeled 6^{-7} . The bar is divided into segments labeled 1, 7, and 1.
- Stage 4 (Right): Labeled 6^- . The bar is divided into segments labeled 2, 1, 1, and 7.

Four bar charts showing the distribution of the number of non-zero entries in the product of two matrices for different matrix sizes and structures. The x-axis represents the number of non-zero entries, and the y-axis represents the number of pairs of matrices that result in that count. The four charts are for 2^{-7} , 2^7 , 2^{-5} , and 5^7 . The 5^7 chart is labeled "D.C. al Coda".

Matrix Size	Number of Non-zero Entries	Count
2^{-7}	1	1
2^7	1	7
	2	1
	3	2
	4	3
	5	2
	6	1
2^{-5}	1	2
	2	1
5^7	1	1
	2	1
	3	7
	4	7
	5	6
	6	6
	7	6

6^{-7} 	2^{-7} 	5^7 	1^{47}
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6^{-7} 	2^{-7} 	5^7 	6^{-}
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6^{-47} 	6^{-7} 	6^{-} 	2^{-7}
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2^7 	$2_{/5}^{-}$ 	5^7 	2^{-7} 5^7
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