

Opus 60 - 25 Estudios - no 16

(Boije 1006_PublicDomain)

Fernando Sor (1778-1839)

Andantino

 = 100

	1	3	1	2	2	1	3	0	0	1	3	4	1	1	1	1	1
2	0		1			0		0		3							
	0		2			0			2					2		0	
4								4									
											0		1		0		
									2		0						
														2		4	0
													3			2	0

5				6				7				8				9			
0	0	3		1				0	1	0		0				3	1	2	
0	0	4		2				0				0	0	2		0		2	
	0				0	4	0		3	2			0	4	0		0		
										3									

Diagram illustrating the decomposition of the tensor product of two fundamental representations of $SU(3)$. The decomposition is shown as:

$$2 \otimes 2 = 12 \oplus 6$$

The diagram shows two fundamental representations (represented by a single vertical line) combining to form a direct sum of a symmetric second-rank tensor (two vertical lines) and an antisymmetric second-rank tensor (two vertical lines with a horizontal bar between them). The symmetric tensor has dimension 12, and the antisymmetric tensor has dimension 6. The total dimension is 12 + 6 = 18.

10	11	12	13
0 3 0 0	1 0		0 1 3
0 2 3	0 0	2 0 0	0 0 3 2 0
4	2 0	3 4 2 0	









4

42 1   1 2 3   

☐ ☐ ☐ ☐ ☐

[illegible]

$21 \quad 4 \quad \begin{array}{|c|} \hline \\ \hline \end{array}$
 $ \quad \begin{array}{|c|} \hline \\ \hline \end{array} \quad 1$
 $4 \quad 1 \quad $
 $42 \quad 1 \quad \begin{array}{|c|} \hline \\ \hline \end{array}$
 $1 \quad 4 \quad \begin{array}{|c|} \hline \\ \hline \end{array}$

3 

 $D(C$

24	5	3	0	25	2	0	3	26	0	4	0	2	27	5	3	0	2	28	3	4	0	0	0
	4	2			2	0	2		0							0				4	0	0	0
					0	2	4										0			5			

43 1 2 1 2 3 1 4 1 1 123 

29 30 31 32 33

3	3	2	0	0	0	3	2	2	2
4	0	4	0	2	2	1	2	1	1
0	0	0	0	0	0	2	0	2	0

12 21 412

34 35 36 37

3	10	2	3	5	3	1	2
0	0	1	0	2	0	0	1
0	0	2	0	4	0	2	2

4 2 3 4 413

38 39 40

0	3	2	5	3	0	0	3	0	1	0	2	0	0
0								2	0	0	3	4	0
								4			3	2	0

2 1 4 2 13 2

41 42 43 44

0	0	3	3	2	1	0	3	1	0	0	0	2	0
0	0	0	0	0	0	0	0	3	2	3	0	4	0
3	2	0	0	0	0	0	0	0	0	0	0	0	0

2 1 1 12 43 13

45 46 47 48

0	3	2	3	2	5	3	2	3	0	0	1	0	2	0	0
0	1	2	0	0	0	0	0	0	0	0	0	0	3	4	0
											2	0	3	2	0

2 1 4 2 1 2 13 2

49 50 51 52

0	1	3	0	3	2	5	3	0	1	0	0	7
0	3	2	0	4	0	0	0	0	0	2	0	0
				3					4	3	2	3

4 43 2 1 4 2