

## 4.5: Character Tables

|                |   |
|----------------|---|
| C <sub>1</sub> | E |
| A              | 1 |

|                |   |    |         |  |
|----------------|---|----|---------|--|
| C <sub>s</sub> | E | sh |         |  |
| A'             | 1 | 1  | x,y,Rz  | x <sup>2</sup> ,y <sup>2</sup> ,z <sup>2</sup> ,xy |
| A''            | 1 | -1 | z,Rx,Ry | yz,xz  |

|                |   |    |          |  |
|----------------|---|----|----------|--|
| C <sub>i</sub> | E | i  |          |  |
| A <sub>g</sub> | 1 | 1  | Rx,Ry,Rz | x <sup>2</sup> ,y <sup>2</sup> ,z <sup>2</sup> ,xy,xz,yz |
| A <sub>u</sub> | 1 | -1 | x,y,z    |  |

|                |   |                |           |  |
|----------------|---|----------------|-----------|--|
| C <sub>2</sub> | E | C <sub>2</sub> |           |  |
| A              | 1 | 1              | z,Rz      | x <sup>2</sup> ,y <sup>2</sup> ,z <sup>2</sup> ,xy |
| B              | 1 | -1             | x,y,Rx,Ry | yz,xz  |

|                |   |                    |                    |                    |      |  |
|----------------|---|--------------------|--------------------|--------------------|------|--|
| D <sub>2</sub> | E | C <sub>2</sub> (z) | C <sub>2</sub> (y) | C <sub>2</sub> (x) |      |  |
| A              | 1 | 1                  | 1                  | 1                  |      | x <sup>2</sup> ,y <sup>2</sup> ,z <sup>2</sup> |
| B <sub>1</sub> | 1 | 1                  | -1                 | -1                 | z,Rz | xy   |
| B <sub>2</sub> | 1 | -1                 | 1                  | -1                 | y,Ry | xz   |
| B <sub>3</sub> | 1 | -1                 | -1                 | 1                  | x,Rx | yz   |

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