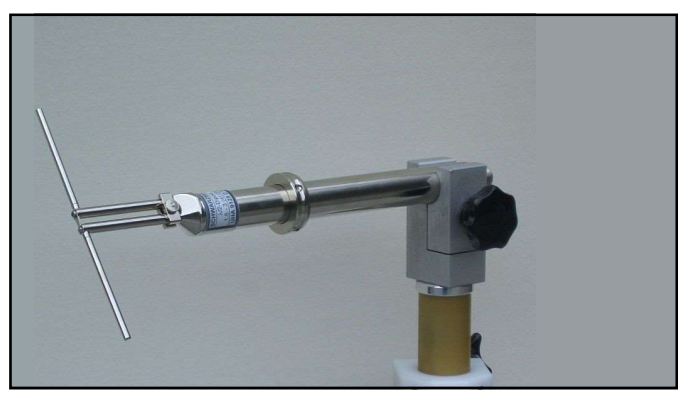


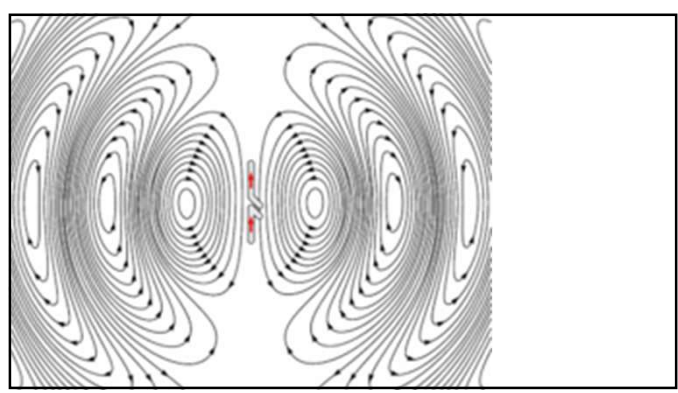
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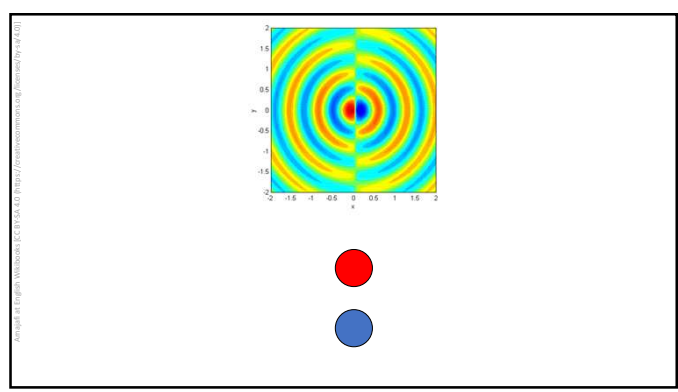
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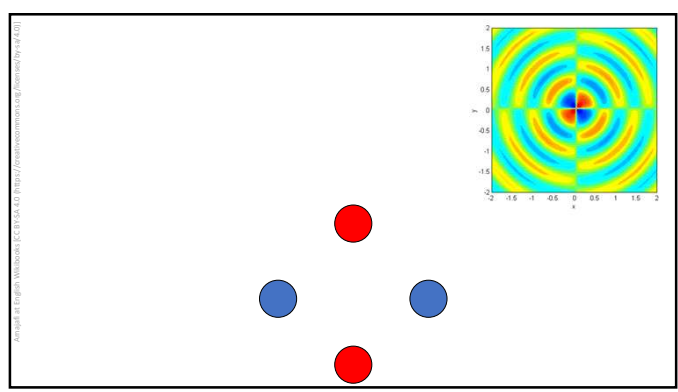
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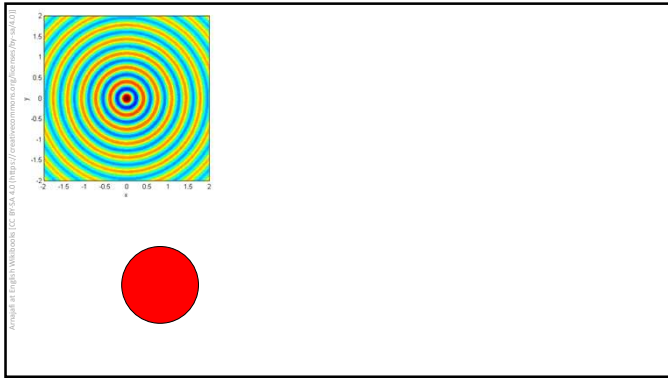
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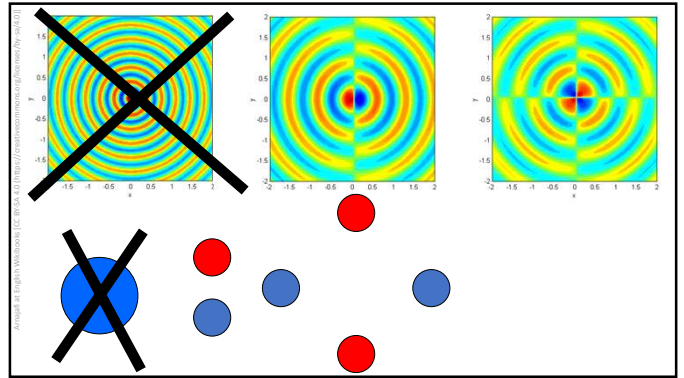
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6



7



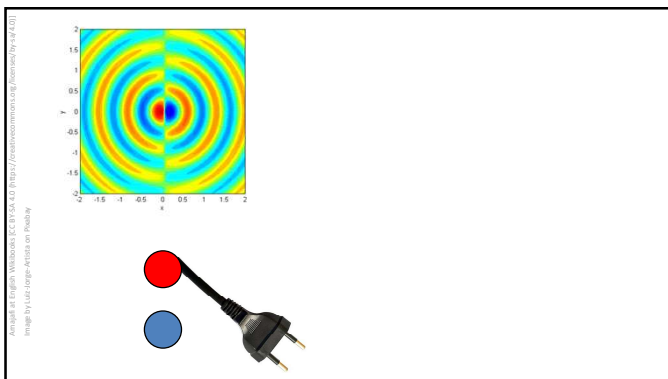
8

multipole radiation for **QUANTUM** systems

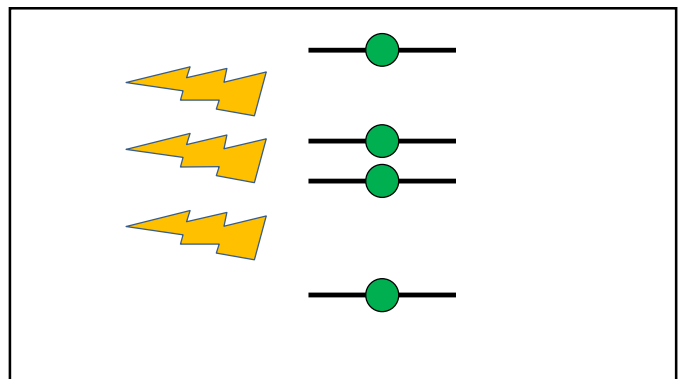
9

Why is an oscillating multipole not a good model for a decaying nucleus emitting radiation?

10



11

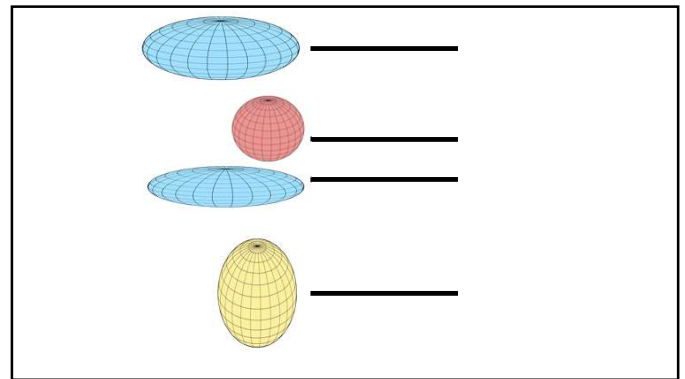


12

Why is an oscillating multipole not a good model for a decaying nucleus emitting radiation?

1. a nucleus is not "powered"

13



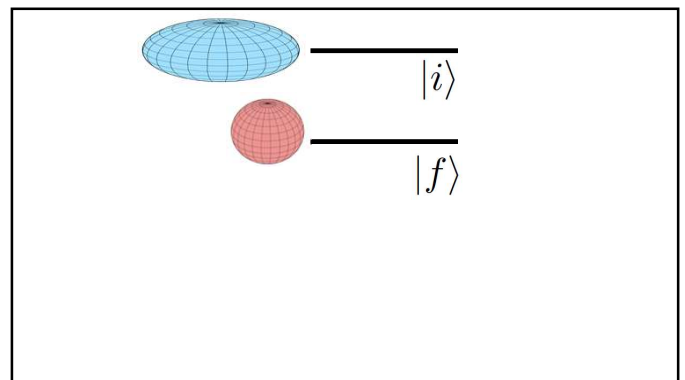
14

Why is an oscillating multipole not a good model for a decaying nucleus emitting radiation?

1. a nucleus is not "powered"

2. a nucleus decays from one multipole moment to another, it is not an oscillating multipole moment.

15



16

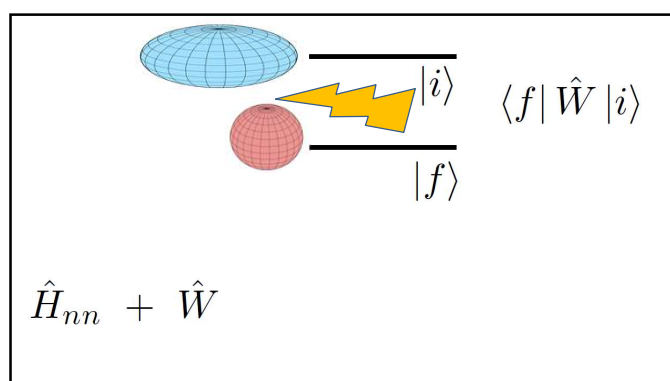
$\langle i | \hat{H}_{nn} | i \rangle$

$\langle f | \hat{H}_{nn} | f \rangle$

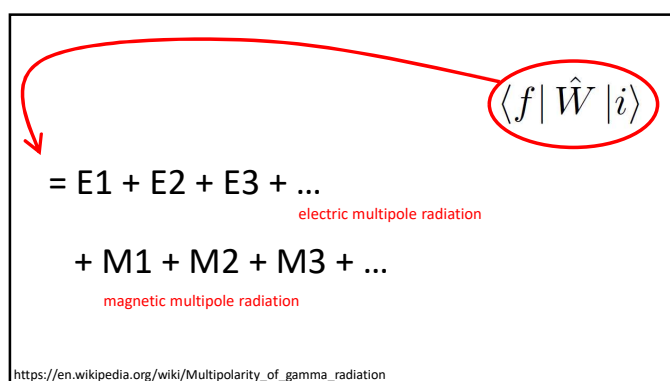
17

$\hat{H}_{nn} + \hat{W}$

18



19



20