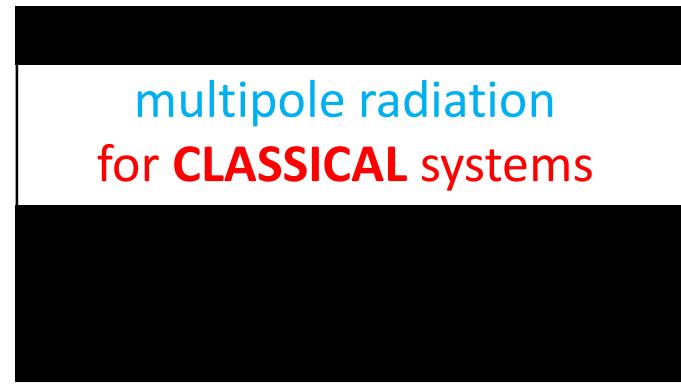
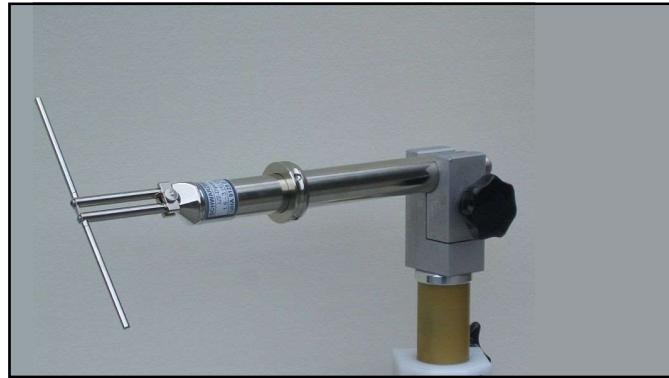


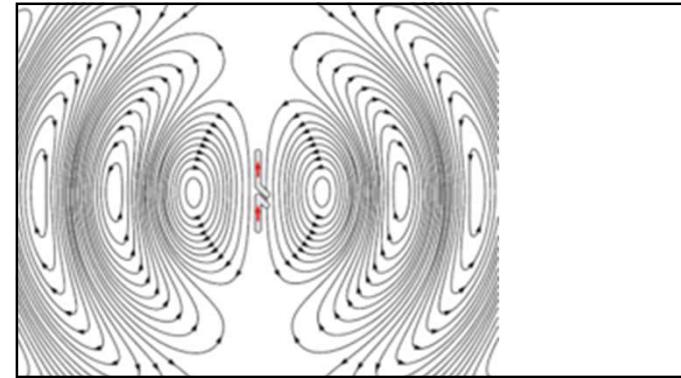
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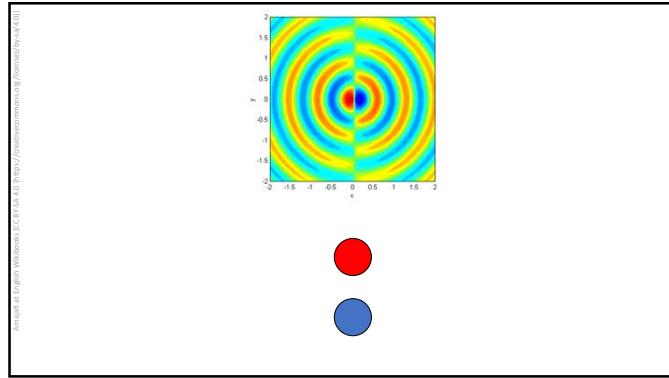
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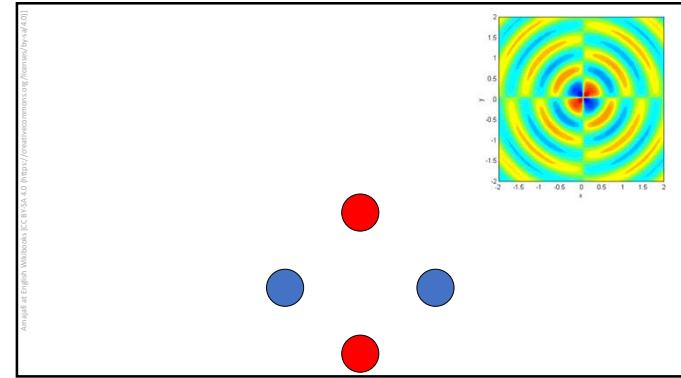
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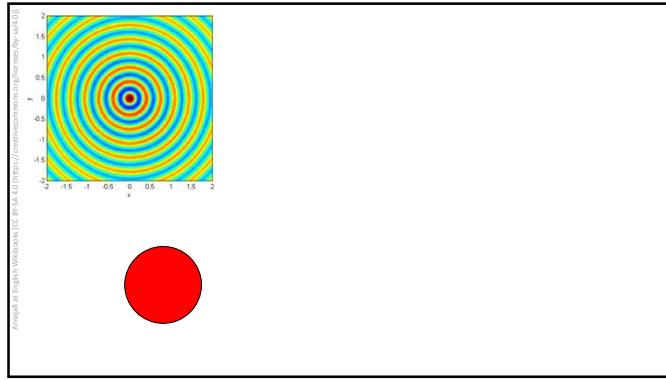
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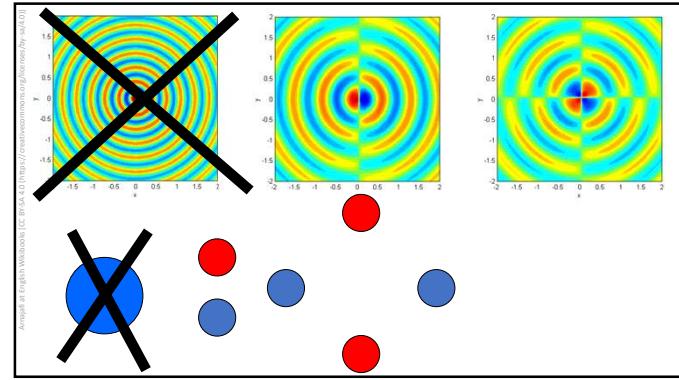
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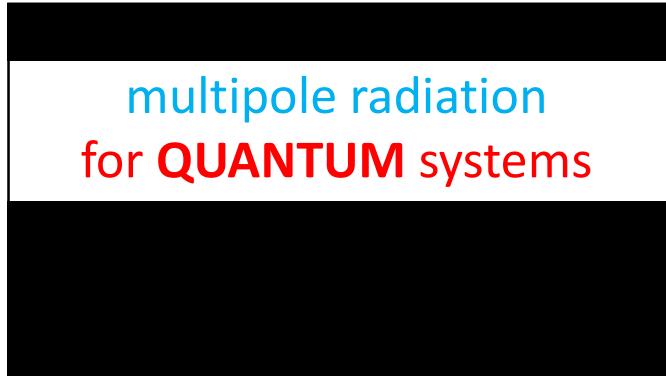
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7



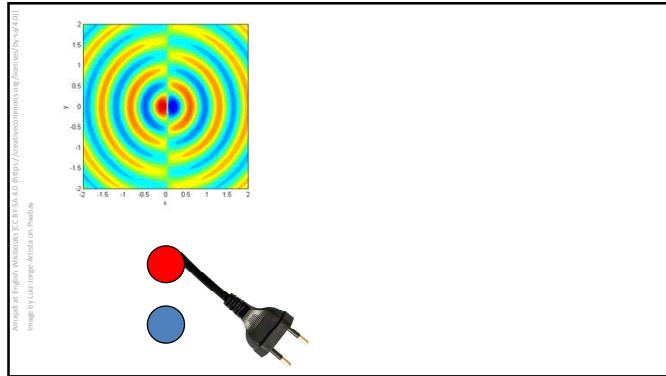
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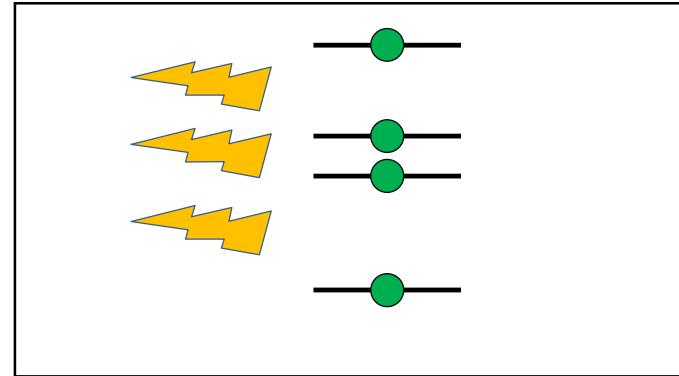
9

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

10



11

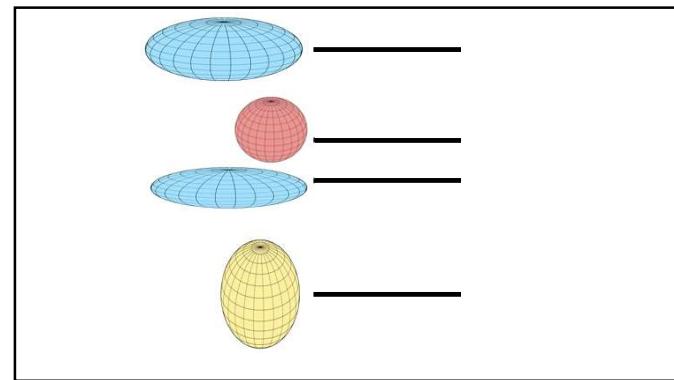


12

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

1. a nucleus is not “powered”

13

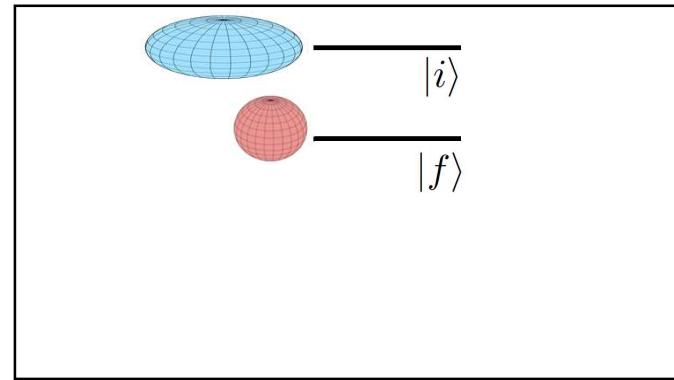


14

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

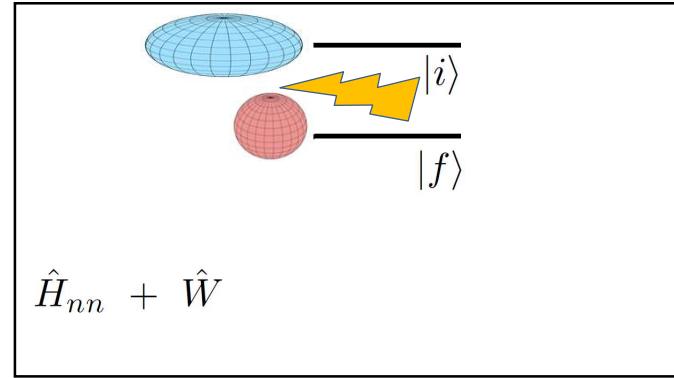


16

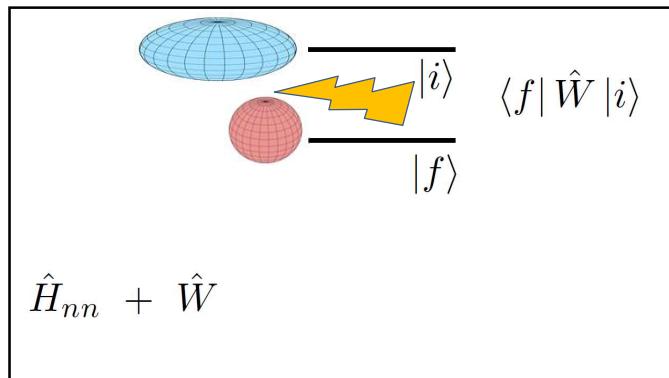
$$\langle i | \hat{H}_{nn} | i \rangle$$

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

17



18



19

$$\langle f | \hat{W} | i \rangle = E_1 + E_2 + E_3 + \dots$$

electric multipole radiation

$$+ M_1 + M_2 + M_3 + \dots$$

magnetic multipole radiation

https://en.wikipedia.org/wiki/Multipolarity_of_gamma_radiation

20