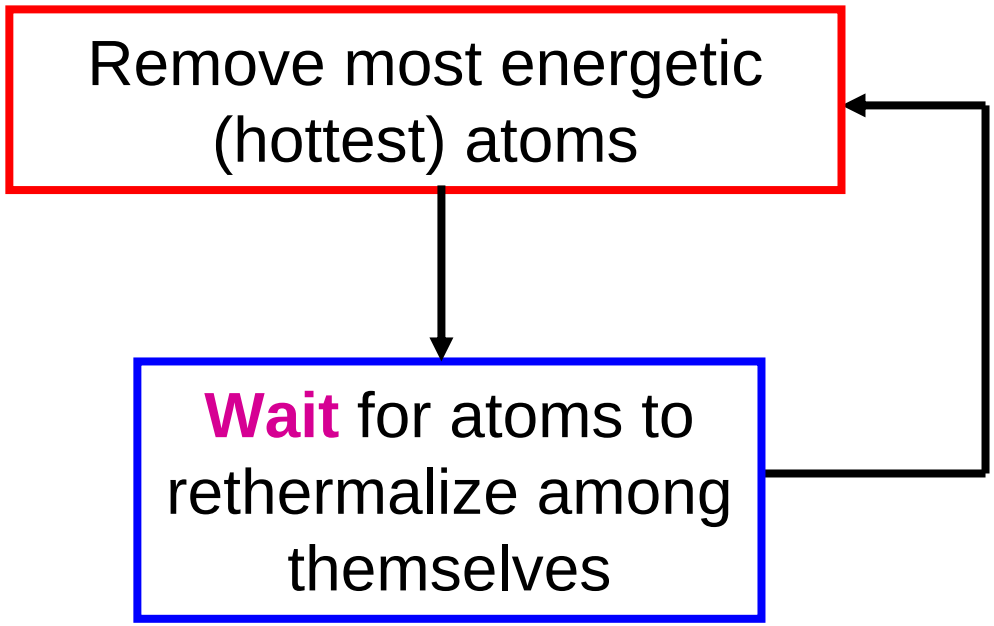
# Important Dates

1. Oral presentations on Monday, April 25.
2. Outline + Figures due on Monday, April 18.
3. First draft of paper due on the day of oral presentation.
4. Final version of paper due on April 29.

# Evaporative Cooling



**Wait time** is given by the elastic collision rate $k_{elastic} = n \sigma v$

**Macro-trap:** low initial density, evaporation time ~ 10-30 *s*.

**Micro-trap:** high initial density, **evaporation time ~ 1-2 *s*.**

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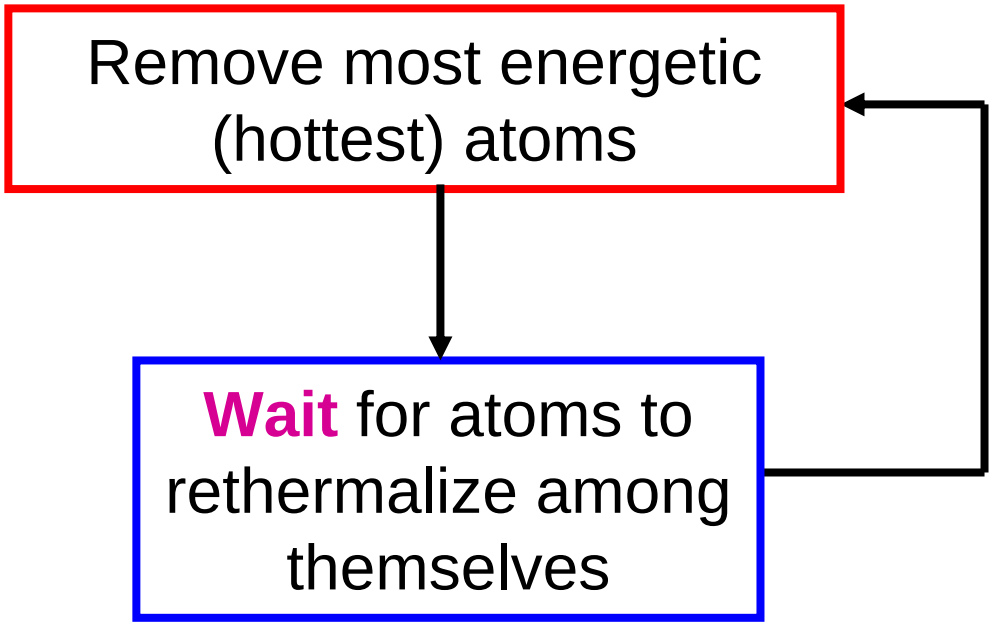


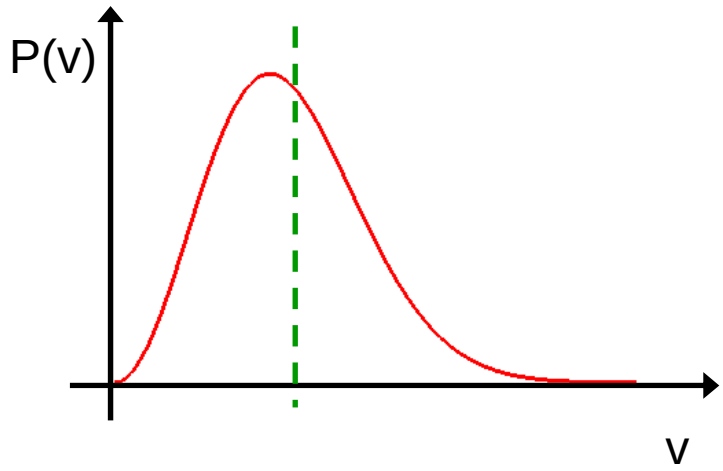


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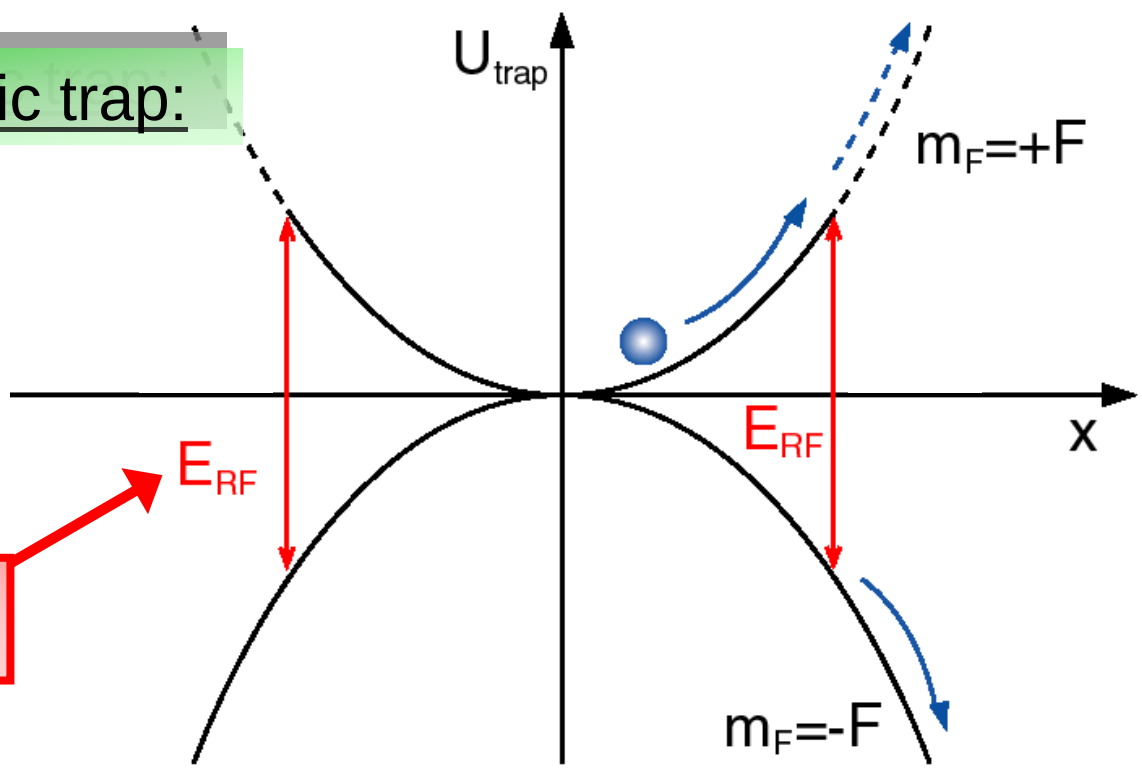
# RF Evaporation

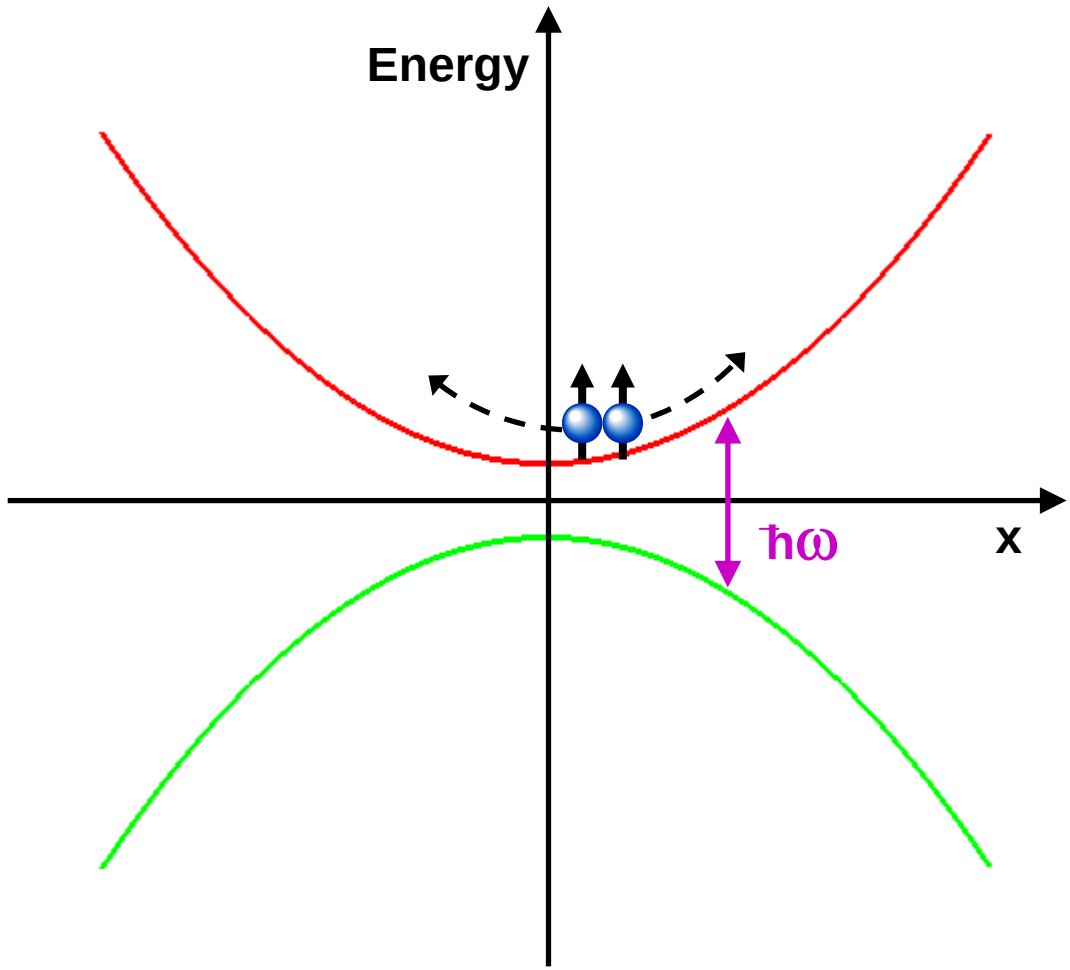
In a harmonic trap:




$$E_{RF} = \hbar\omega$$

- **RF frequency** determines energy at which spin flip occurs.
- Sweep RF between 1 MHz and 30 MHz.

# RF evaporation: dressed atom picture



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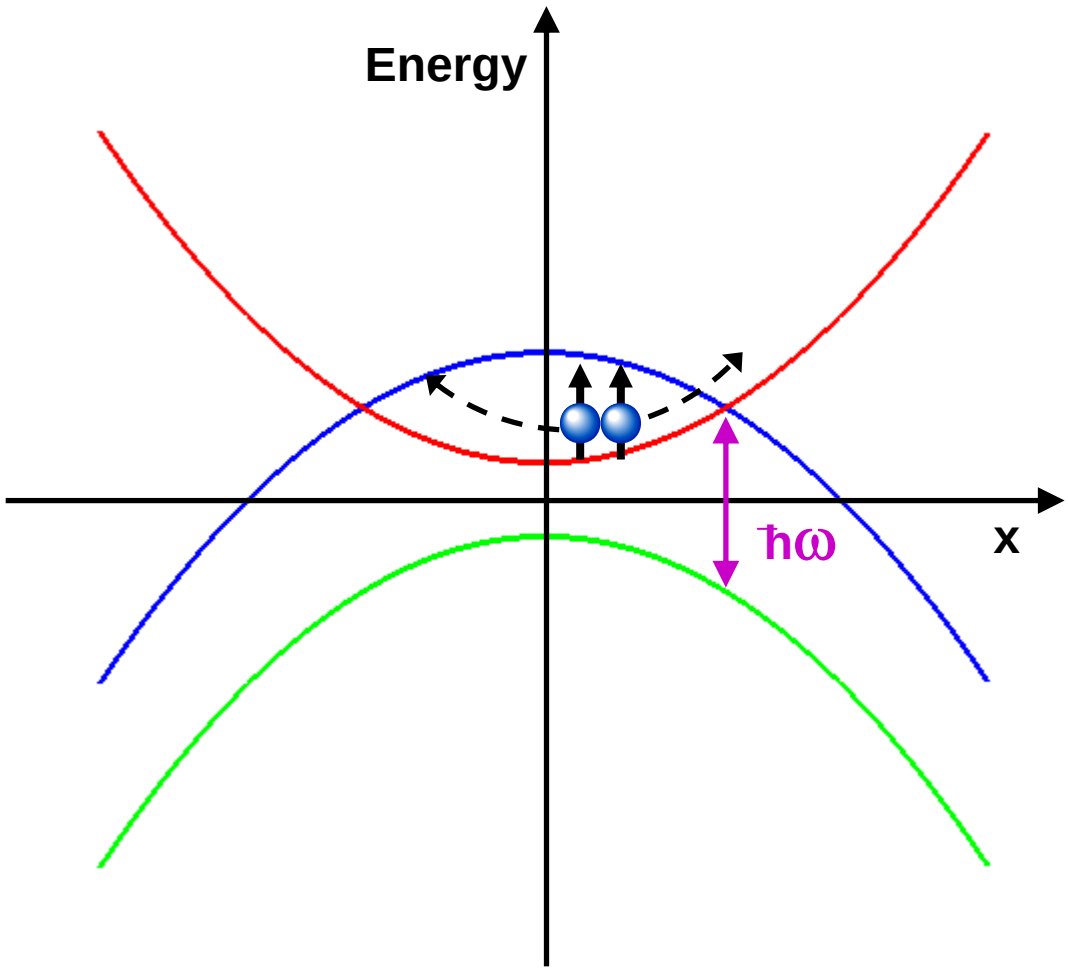

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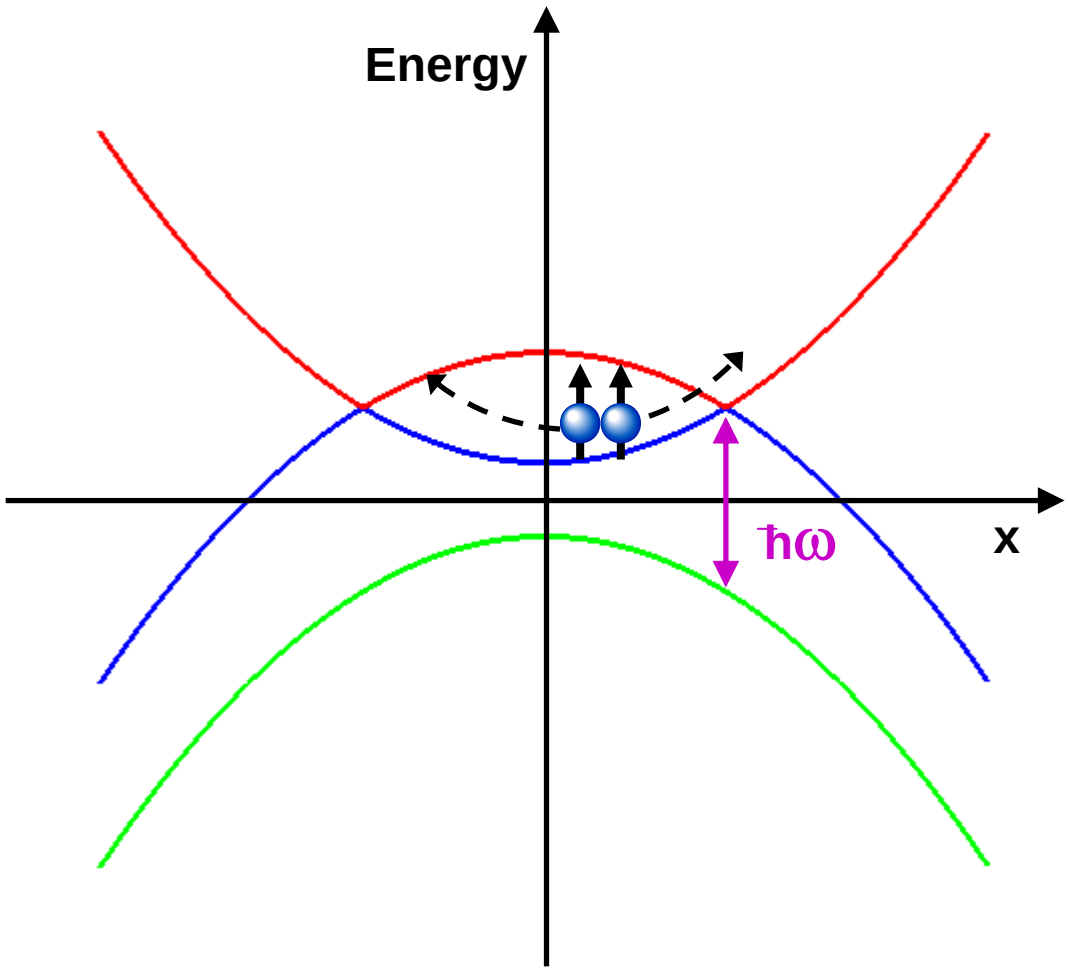

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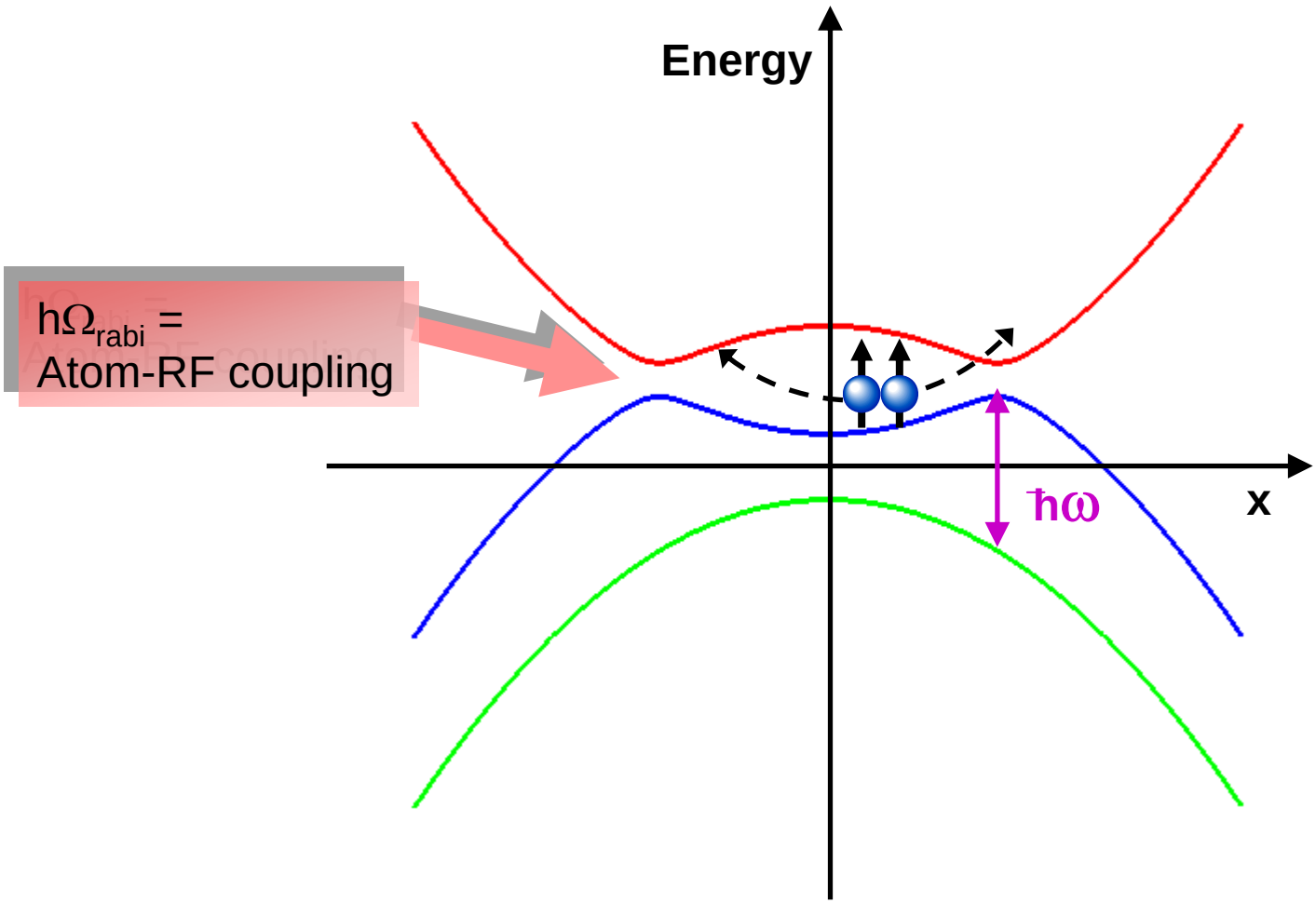
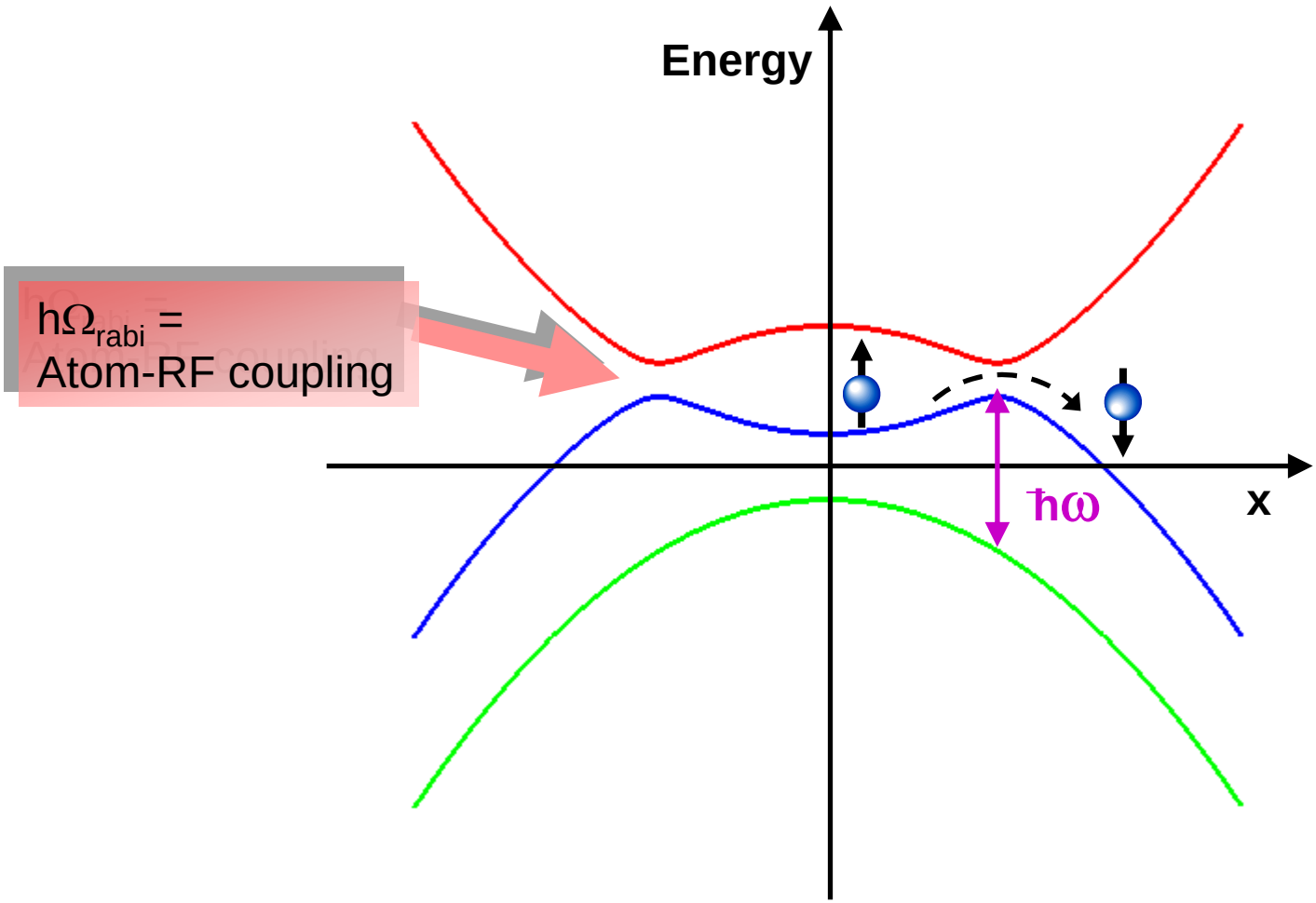
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