

# Example: Quantum Mechanics



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- This is an example presentation about quantum mechanics
- The front frame is generated using *frontframe*
- Note also that the notes can be turned on and off in the first line of this file

# Outline

- ▶ The Schrödinger Equation
- ▶ The Probability distribution

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## Outline

Here is the outline of the presentation

# Outline

- ▶ The Schrödinger Equation
- ▶ The Probability distribution
- ▶ References

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## └ Outline

Additional note for the last bullet point. Note that the progression wheel is not moving when elements are added to a slide.

# The Schrödinger Equation

The time-independent Schrödinger equation

The time-independent Schrödinger equation is given by

$$\hat{\mathcal{H}}\Psi_n = \varepsilon_n \Psi_n,$$

with  $\hat{\mathcal{H}}$  as the Hamiltonian,  $\Psi_n$  as the wave function and  $\varepsilon_n$  as the corresponding energy [1].



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# The Probability Distribution

The probability distribution in quantum mechanics is given by

$$P(\boldsymbol{r}) = \frac{\Psi_n(\boldsymbol{r})^* \Psi_n(\boldsymbol{r})}{\int d\boldsymbol{r} \Psi_n(\boldsymbol{r})^* \Psi_n(\boldsymbol{r})},$$

where  $\boldsymbol{r}$  is a set of spatial and spin coordinates [2].



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The pause function can be used to add more elements to a slide



# Thank you!

The title frame contains just a large centered text (should not be confused with frontframe)

# References

1. [Schrödinger, E.](#) An Undulatory Theory of the Mechanics of Atoms and Molecules. *Physical Review* **28**, 1049 (1926).
2. [Born, M.](#) Zur Quantenmechanik der Stoßvorgänge. *Zeitschrift für Physik* **37**, 863 (1926).



## References

References

1. [Schrödinger, E.](#) An Undulatory Theory of the Mechanics of Atoms and Molecules. *Physical Review* **28**, 1049 (1926).
2. [Born, M.](#) Zur Quantenmechanik der Stoßvorgänge. *Zeitschrift für Physik* **37**, 863 (1926).