

# Statistics – The Normal Distribution



## Normal Distribution

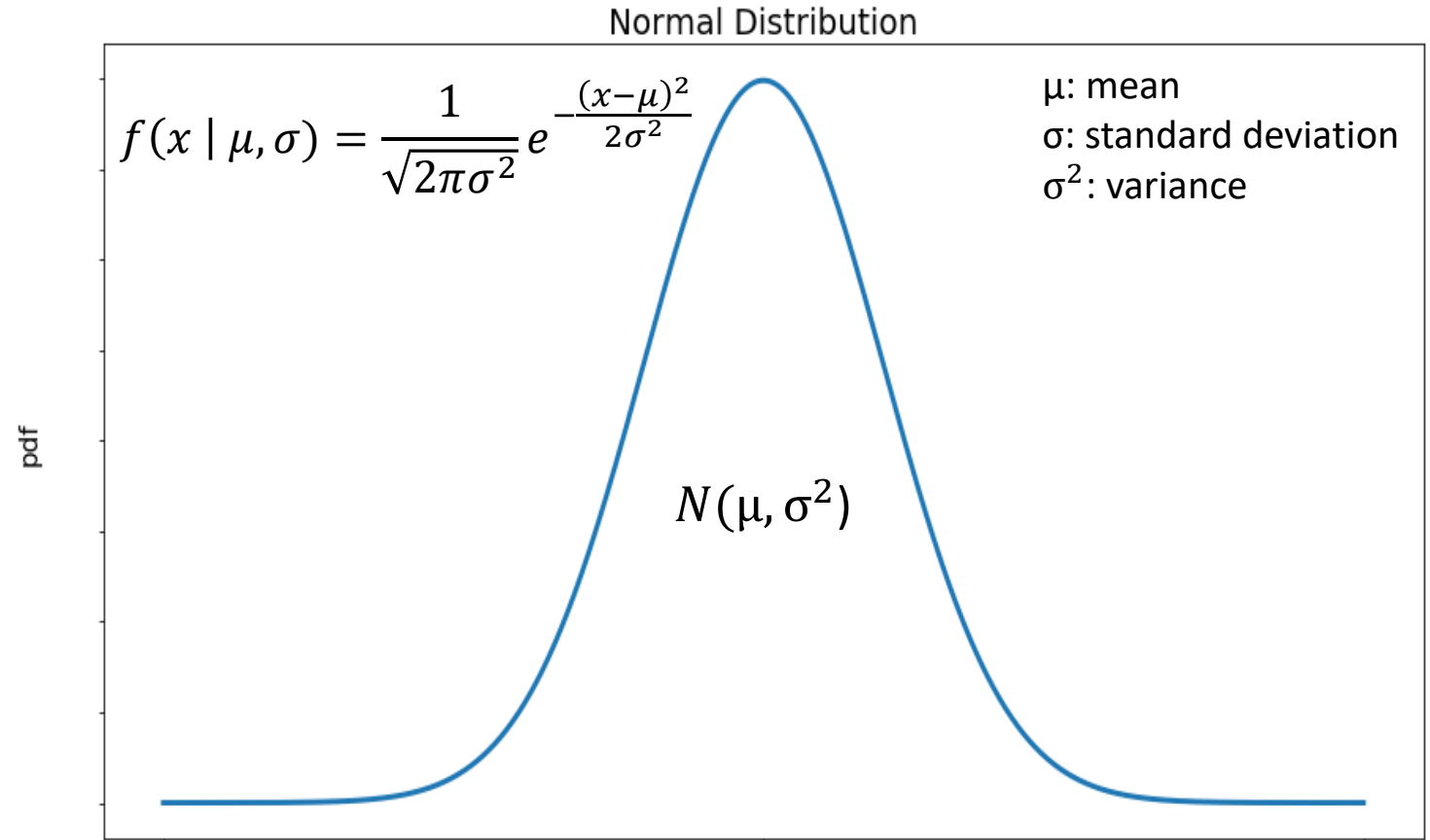
What are the properties of a Normal Distribution?

# Normal Distribution

## The Normal Distribution:

Many random variables in nature, science and other fields (approx.) follow a Normal Distribution.

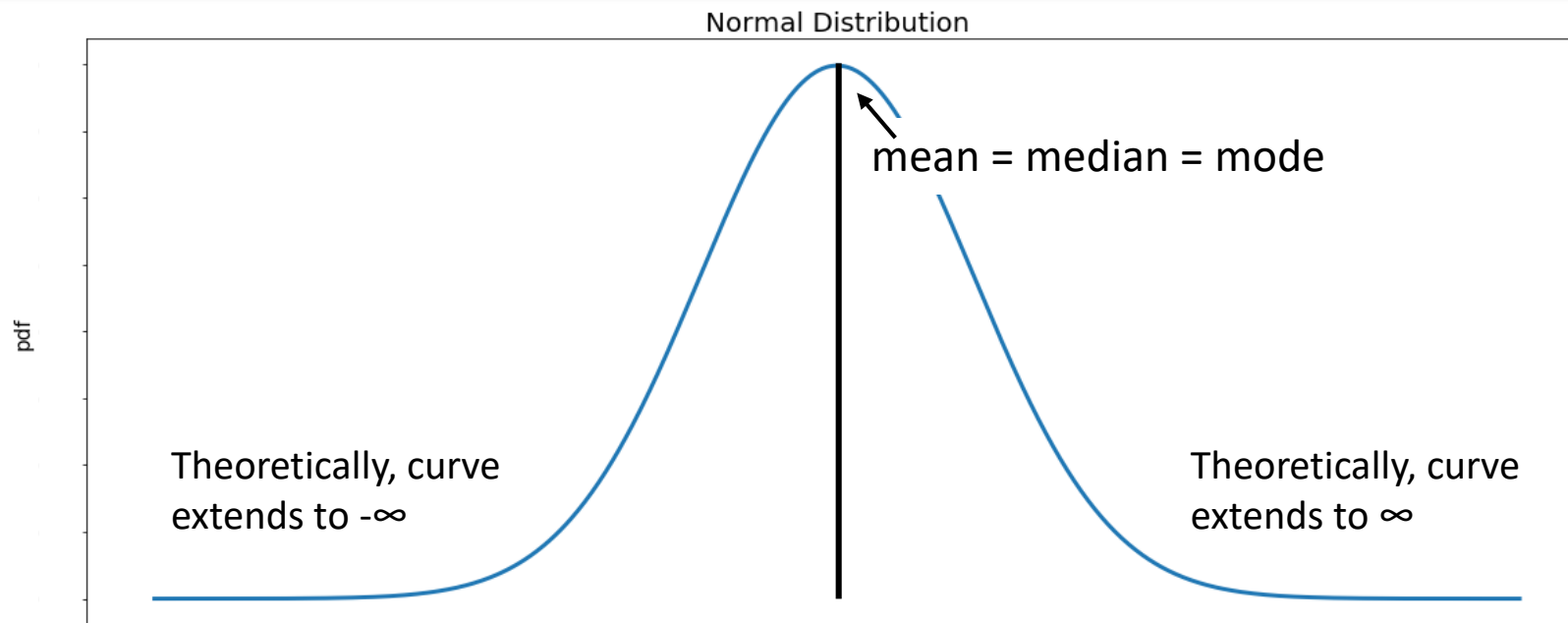
Properties are very useful for inferential statistics (Central Limit Theorem).



# Normal Distribution - Properties

## Properties

- completely described by **mean** and **standard deviation** / variance
- **symmetrical** around the mean -> **Skew = 0**
- **Kurtosis = 3** / Excess Kurtosis = 0



# Normal Distribution – the 68%, 95%, 99.7% rule

