



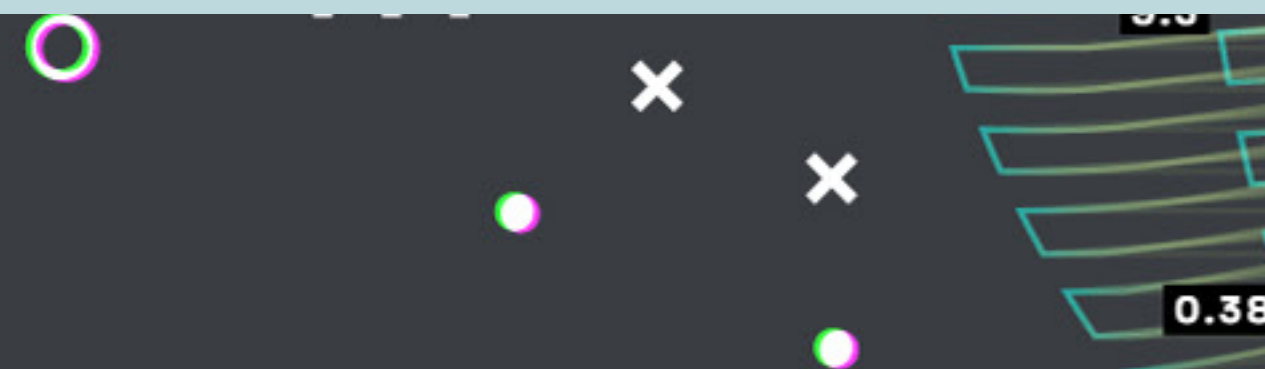
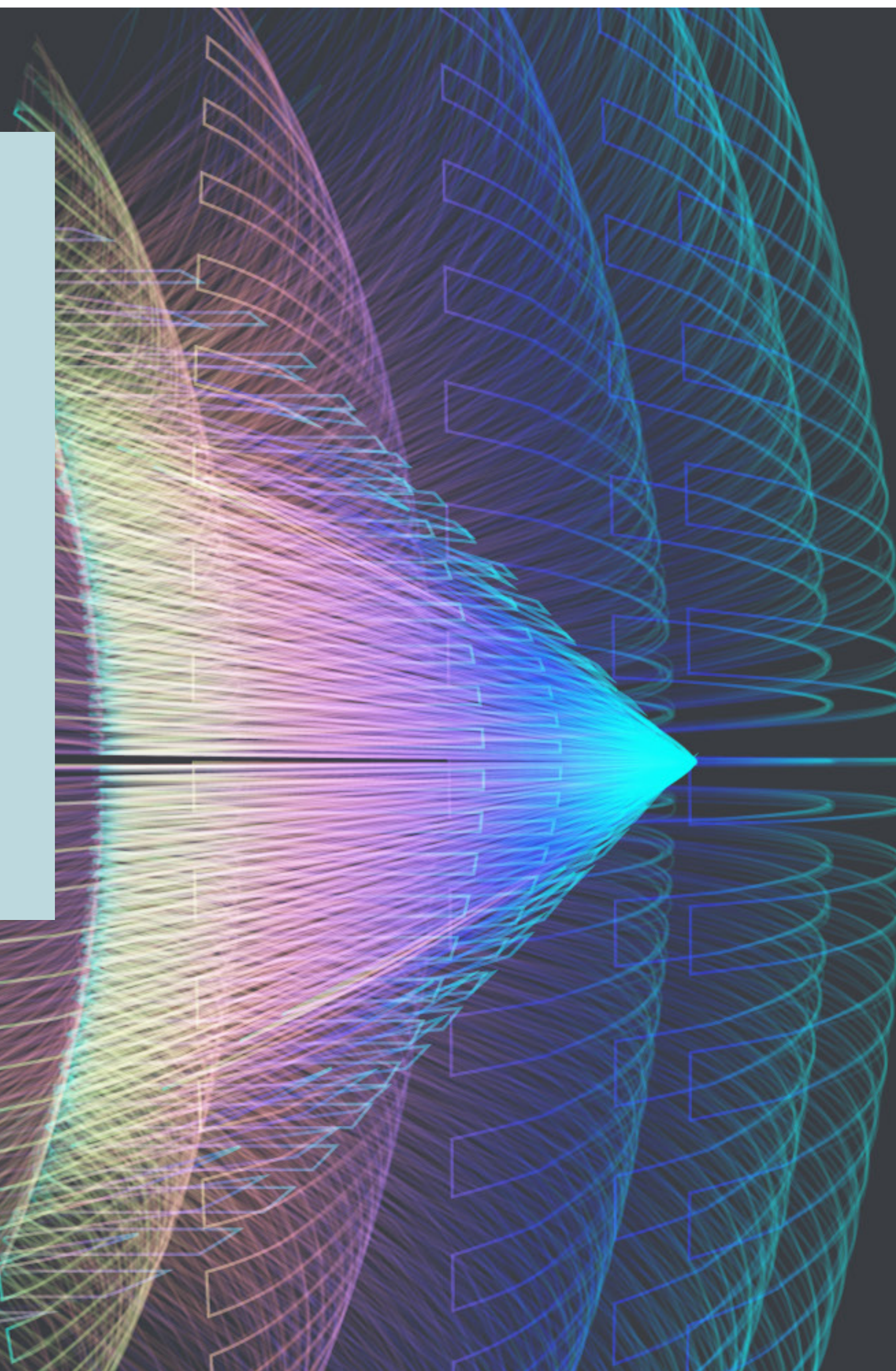
St Petersburg  
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# The Characteristics of Computational Systems

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PhD, Associate Professor





# **The Characteristics of Computational Systems**

# The Characteristics of Computational Systems

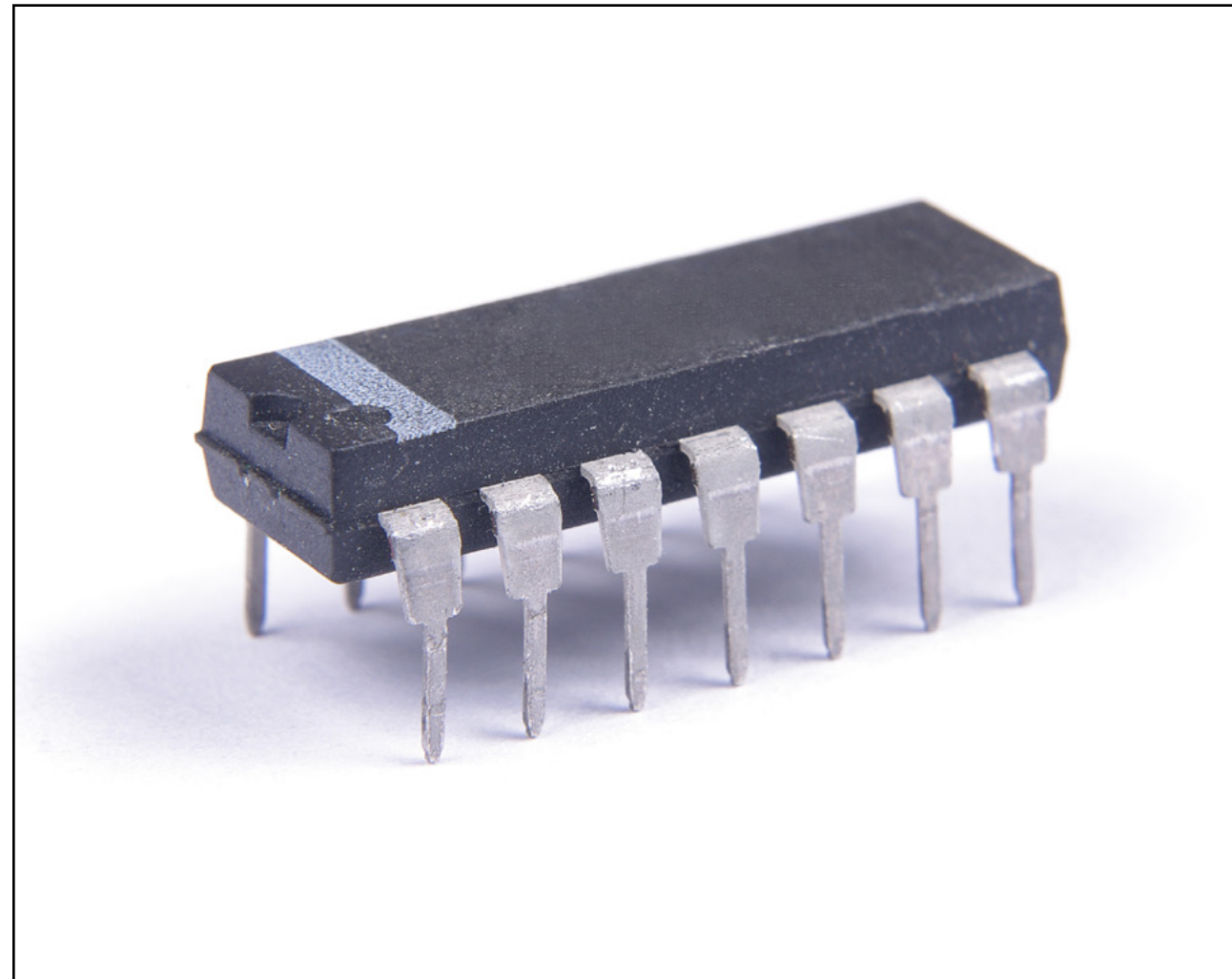
- 1 Information Capacity (Shannon Formula)
- 2 Speed (switching between the states)
- 3 Universality

# The Characteristics of Computational Systems



- 1 Information Capacity (Shannon Formula)
- 2 Speed (switching between the states)
- 3 **Universality**

# Computer Generations



- 1 Vacuum Tubes
- 2 Transistors
- 3 Integrated Circuits
- 4 Microprocessors
- 5 ?

# Week Plan

- ~~Learning objectives~~
- ~~Computation. Information~~
- ~~Computational system characteristics~~
- The goal of computations. Universality. Algorithm
- Computational Complexity
- Quantum computing
- Quantum effects
- The Multiverse interpretation of quantum mechanics



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