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Quantum computing and Art: reinterpreting classical masterpieces

Monday 5 May 2025 17:45 (30 minutes)

In this presentation I will talk about an application of quantum computing to compose artworks. The main idea of this project is to revisit three paintings of different styles and historical periods: "Narciso", by Michelangelo Merisi (Caravaggio), "Les fils de l'homme", by René Magritte and "192 Farben", by Gerard Richter. We utilize the output of a quantum computation to change the composition in the paintings, leading to a series titled "Quantum Transformation I, II, III". In particular, the figures are discretized into square lattices and the order of the pieces is changed according to the result of the quantum simulation. Besides experimenting with hardware runs and circuit noise, our goal is to reproduce these works as physical oil paintings on wooden panels. With this process, we complete a full circle between classical and quantum techniques and contribute to rethinking Art practice in the era of quantum computing technologies.

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