

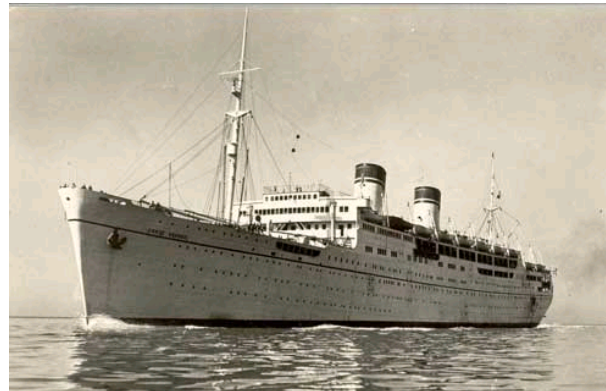
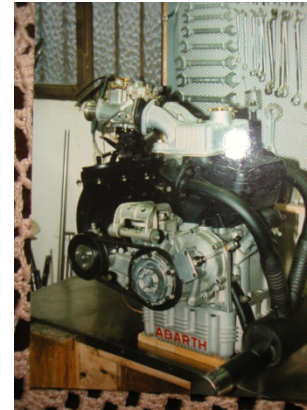
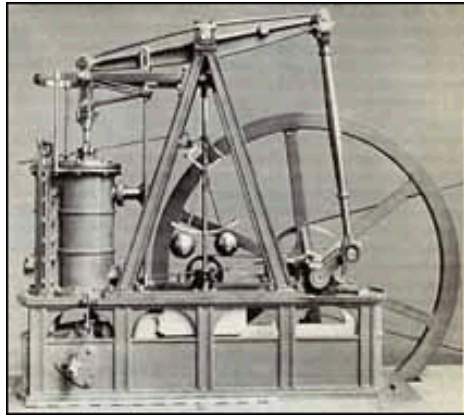
B029084 (B222) -
MODULO: PRINCIPI DI
MECCANICA

What am I doing here ?

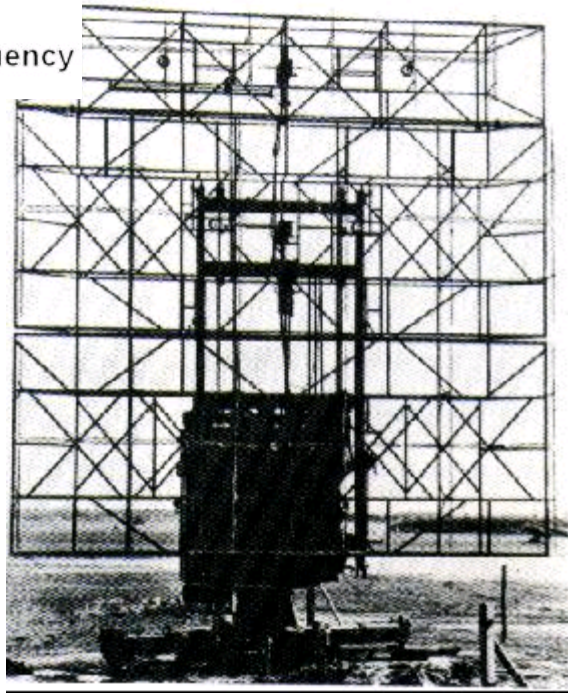
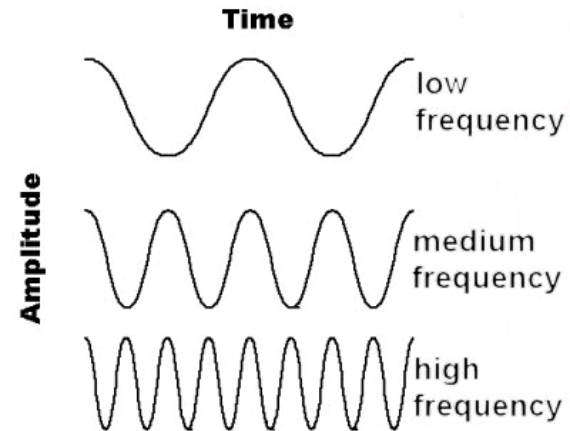
Technologies based on Mechanics



Technologies based on Thermodynamics



Technologies based on Electrodynamics





Francesco Saverio Cataliotti

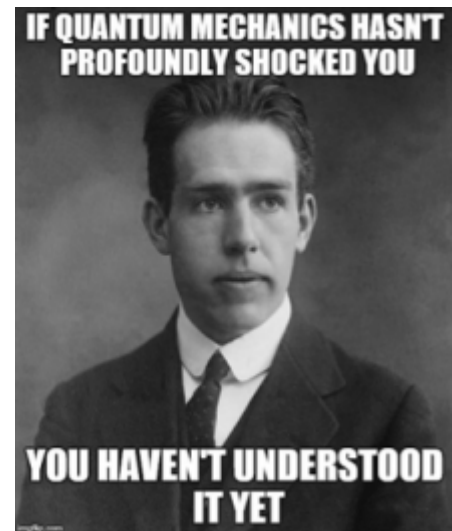
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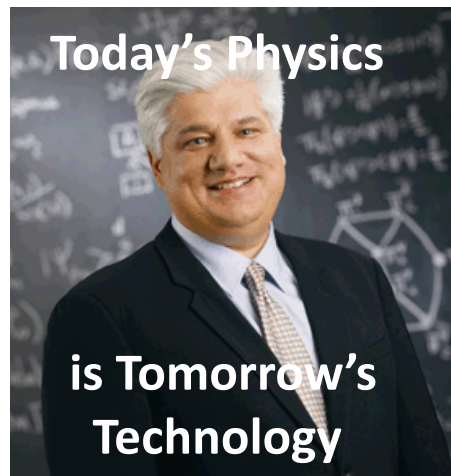
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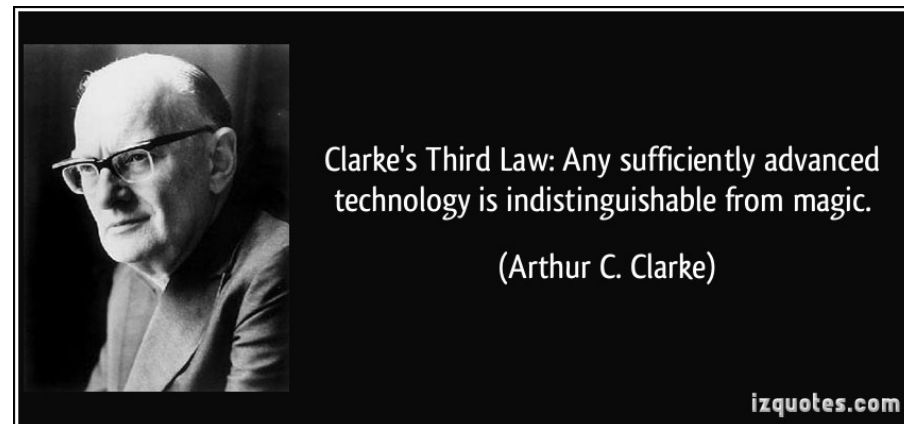
A few memorable quotes



E. Schroedinger



M. Lazaridis



Technologies based on Quantum Mechanics - present -



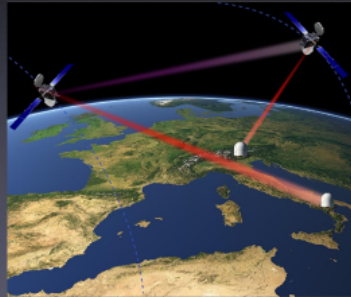
Quantum communications

Sharing information freely and securely is an essential right in a democratic society

Quantum fiber optic networks with quantum repeaters

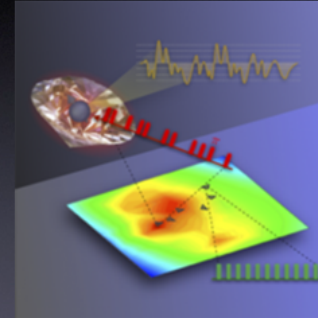


Satellite-based quantum links



Quantum sensing

Smaller and faster sensors

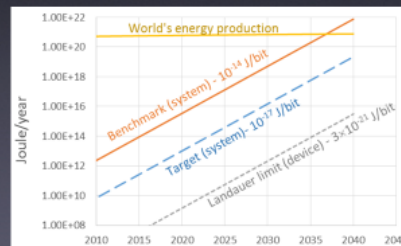
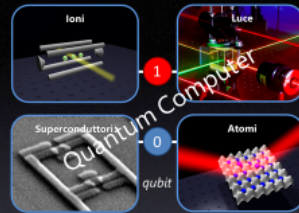


Real time measurement of neuronal activity

single quanta, e.g. electrons, the smallest possible charges and magnets

consumer devices and services, from medical diagnostics and imaging to high-precision navigation, to Internet of Things

Quantum Simulators and Quantum Computers

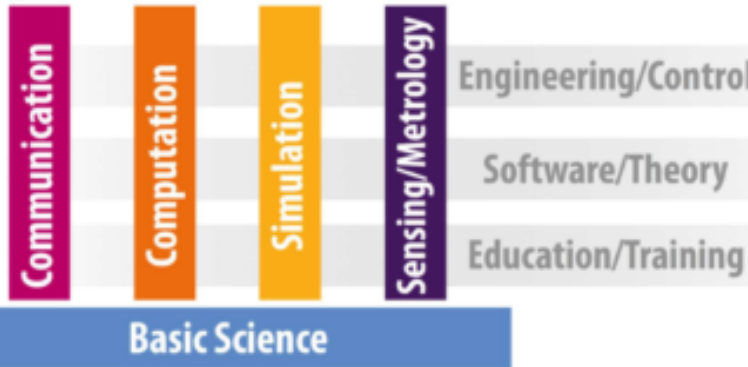


"quantum parallelism" of quantum bits operating at minimum energy dissipation

Enormous computing power for optimization (traffic, production, energy grids, ...) and quantum machine learning

Research Funding

EUROPEAN QUANTUM FLAGSHIP PROGRAM



Quantum Manifesto



Quantum Manifesto

