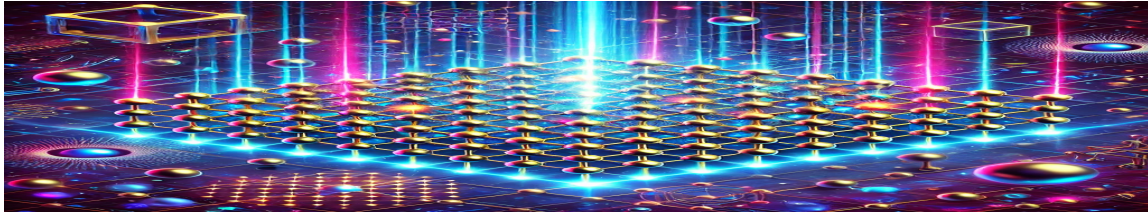




Quantum Dots: History, Challenges, and Perspectives



Celebrating 40 years of groundbreaking research in the field of quantum dots, from the early pioneering studies to the latest developments in quantum technologies.

Overview

In 1985, the landmark paper titled “Growth by Molecular Beam Epitaxy and Characterization of InAs/GaAs Strained-Layer Superlattice” was published, marking the start of a new era in the study of quantum dots. Over the past four decades, this field has grown into a vibrant interdisciplinary area of research, intertwining materials physics, advanced characterization techniques, nanotechnology, optics, and quantum technologies. Quantum dots have become key components in a wide range of applications, from optoelectronics and photonics to quantum computing and communication systems.

Agenda

14:00 - 15:00 - Professor Claude Weisbuch (IP Paris & UC Santa Barbara, USA)

Keynote Lecture: *The long saga of quantum size effects in semiconductors and of their applications: From quantum dots to quantum wells, ... back to quantum dots*

15:00 - 15:30 - Break

15:30 - 16:30 - Dr. Jean-Michel Gérard (CEA LETI)

Keynote Lecture: *Self-assembled quantum dots, from a discovery by chance to key applications in quantum photonics*

16:40 - 17:10 - Round Table Discussion

Challenges and Future Perspectives in Quantum Dot Research

17:15 - 18:15 - Cocktail Reception, Networking and Discussion

Date: December 12, 2024 at Telecom Paris, 19 Place Marguerite Perey, Palaiseau, Amphitheater 2

Getting there: <https://www.telecom-paris.fr/en/campus/life/maps-directions>

Join us for an afternoon celebrating the rich history, current challenges, and future perspectives of quantum dots in scientific and technological advancements.