

Friday Materials Science Colloquia #16

Friday, October 24th 2025, 12 p.m.
Seminar room, U5 Building – via Roberto Cozzi 55, Milano

Lecturer: **Prof. Richard Nötzel**

Title: Epitaxial semiconductor quantum dots and nanowires: Growth, properties and applications

After a brief history of my research in Germany, Japan, The Netherlands, Spain and Italy, I will focus on the recent research on InGaN-based quantum dots and nanowires at South China Normal University. This will include the growth, properties and applications of InN/InGaN quantum dots and InGaN nanowires for biosensors and solar hydrogen generation - InGaN nanowires on pyramid-patterned Si - the growth, properties and applications of In-rich InGaN/Cu₂O heterostructures for solar hydrogen generation and photoelectrochemical photodetectors and - finally novel solid-state photodetectors for dual-wavelength photodetection and the red InGaN core-shell nanowire LED.