







Annex A – Positions with specific topic

Ph.D. Course	NANOSCIENCES
Scholarship type	Financed by CNR-NANO
	Partenariato Esteso "National Quantum Science and Technology Institute - NQSTI" (PNRR PE0000023)
N.	1
CUP	E53C23001330008
Title	Photonic platform for quantum technologies
Brief description of the research project	The candidate's research activity will focus on the development of quantum engineering methodologies of miniaturized optical frequency combs based on semiconductor heterostructures, operating in the far infrared. The activities will also include the development of innovative nanofabrication architectures to devise harmonic combs and the development of advanced optical techniques to characterize the electrical, optical and metrological properties of the developed sources.
Period of study and research to be carried out abroad	Each student is ordinarily expected to carry out periods of research and training activity, related to the research project, with highly qualified partners and/or institutions in Italy and abroad. The foreign and Italian destinations will be agreed with the students who will be holders of the scholarship, decided by supervisors and authorized by the Ph.D course board.