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Italiadomani
PIANO NAZIONALE
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Annex A – Positions with specific topic

Ph.D. Course	NANOSCIENCES
Scholarship type	Co-financed by PLANCKIAN SRL Dottorati Innovativi- PNRR Missione 4, Componente 2 "Dalla Ricerca all'Impresa" - Investimento 3.3 (art. 2, DM 117/2023)
N.	1
CUP	E53C23001330008
Title	Quantum Effects in Energy Management
Brief description of the research project	The project focuses on studying the possibility of using quantum effects to improve energy management processes (eg, work extraction from a quantum system, energy loading, energy transmission). Particular interest will be devoted to the detailed analysis of the possible interaction between energy flows in quantum devices and their ability to process information in the presence of noise. Although the analysis will be conducted mainly at a theoretical level, an important aspect of the research will be to clarify the connection with existing experimental platforms, as part of an effort to improve the performance of the latter
Period of study and research to be carried out abroad	It is mandatory to carry out periods of study and research in companies or research centers from a minimum of six (6) months to a maximum of twelve (12) months, even if not continuous, and periods of study and research abroad, The destinations for each student will be decided by supervisors and the Ph.D course board.