The Nanoscience Cooperative Research Center, CIC nanoGUNE, located in Donostia / San Sebastian, Basque Country (Spain), is currently looking for a

MASTER STUDENT
to work on
Theory

CIC nanoGUNE
MEMBER OF BASQUE RESEARCH & TECHNOLOGY ALLIANCE

CIC07 - THEORY

Theory and computational simulation of matter at the

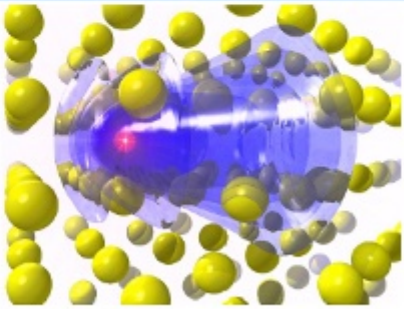
- Theoretical development for methods
- Computational methods development and programming (SIEST
- Computational simulations of nanosystems in supercomputers
- Collaboration with experiments
- Theory again to understand results

Theory and simulations nanoscale quantum non-equilibrium – Nuclei shooting th

From fundamental theory

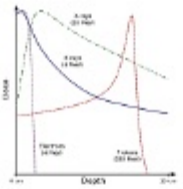
$$F_j = -\psi_{n\mu}\left(\delta_j H^{\mu}{}_{\nu} - i\hbar\, v_k \Theta^{\mu}{}_{j\nu k}\right)\psi^{\nu}{}_{n}\,.$$

Quantum gauge theory in a curved space
(JFK Halliday et al SciPost Phys 2022)



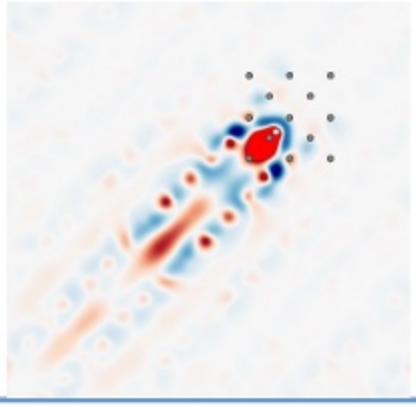
Radiation damage

- Nuclear (fusion)
- Space
- Radiotherapy



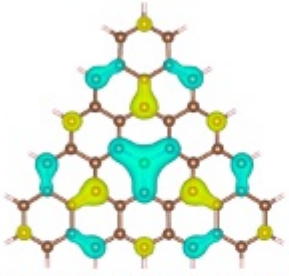
To supercomputers

Electron wake for a high-energy proton in aluminium and diamond

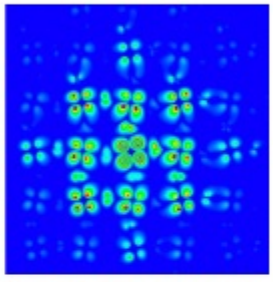


Quantum and topological materials – stability of spin systems for quantum tec

2D nano and heterosctructures



Spin in graphene triangulene - quantum sensing



Nano-sized self-trapped polaron in WO_3

Candidates should **apply** by completing the form below and attaching the following documents:

a. A complete CV and academic record
b. A motivation letter is also recommended

The **deadline** for applications is **29/02/2024**.

NOTES:
(i) All applicants will receive an answer after the end of the selection process; but please note that due to the large number of submissions that are expected, we cannot provide individual feedback.
(ii) Additional information about nanoGUNE's commitment towards HR excellence in Research and Gender Equality are available on our website.
(iii) We encourage you to subscribe to our HR mailing list to receive information related to nanoGUNE's open positions and open calls for different training and talent attraction programs.