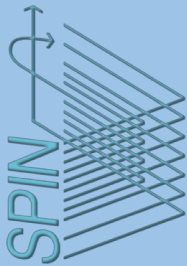


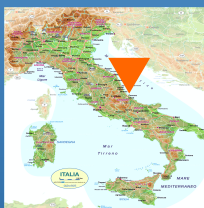
# OPENING: Post-doc Position



Consiglio  
Nazionale  
delle  
Ricerche

Institute for  
Super-  
conducting  
and  
innovative  
materials and  
devices

(CNR-SPIN,  
Chieti)



**One post-doc position (1+1 year) focused on  
“TWO-DIMENSIONAL FERROIC MATERIALS”  
available in the group of  
Dr. Silvia Picozzi (CNR-SPIN Chieti, Italy).**

**Topic:** Inspired by the global thrust towards miniaturization and by the ubiquitous research in 2D-materials, the activity will focus on the **modelling of ferroelectrics, ferromagnets and multiferroics towards the 2D limit**. Materials of interest will range from few layers of CMOS-compatible ferroelectrics ( $\text{HfO}_2$ ) to 2D-chalcogenides ( $\text{SnTe}$ ,  $\text{GeTe}$ ) to 2D halide-magnets ( $\text{CrI}_3$  and related). **First-principles simulations and hamiltonian-modelling** will be performed, aimed at fundamental understanding of **microscopic mechanisms and materials optimization for applications**

**Funding:** The position will be funded by a PRIN-MIUR project called **“TWEET: ToWards fERroElectricity in Two-dimensions”**, headed by Dr. S. Picozzi and with project partners: CNR-SPIN Napoli (Dr. F. Miletto), Politecnico Milano (Dr. C. Rinaldi), Univ. Napoli (Dr. A. Rubano)

**Salary:** 1.600-2.000 Euros/month (net), depending on the candidate experience (Italy has a much lower cost of life compared to Germany/Switzerland/UK, Chieti being particularly cheap in Italy)

**Duration:** 1 year, renewable for an additional year depending on the first year research outcome.

**Start: End of 2019 – Beginning of 2020**

**Research environment:** **MODEM** group - **MO**delling and **DE**sign of functional **M**aterials, headed by Dr. Silvia Picozzi (CNR-SPIN).

**Location:** the activity will be carried out at CNR-SPIN @ University of Chieti (Italy)

**Required Expertise:** A PhD in Physics, Chemistry, Materials Science or related disciplines is needed. Previous experience in first-principles simulations is required.

**Collaborations:** The research activity will be carried out in close collaboration with TWEET experimental partners and with researchers at the NFFA-Trieste Infrastructure (Elettra Synchrotron, Trieste).

**Contacts:** please contact Dr. Silvia Picozzi via email at [silvia.picozzi@spin.cnr.it](mailto:silvia.picozzi@spin.cnr.it) by sending your CV and list of publications. Use as e-mail subject: **“TWEET Postdoc Application”**

**Further info:** <https://sites.google.com/site/silviapicozzi/>