Stéphane GREVY
Born March 28, 1971, in Paris, France
Married, 3 children

LP2i Bordeaux, Le Haut Vigneau, BP120
33175 Gradignan Cedex, France
grevy@lp2ib.in2p3.fr

EDUCATION:

1991-1994: Undergraduate Studies: Fundamental Physics, Université Paris XI
1994-1997: PhD: Study of the halo nuclei 11Be and 11Livia core breakup reactions, Université Paris XI U
2013: HDR : *Experimental study of the N=28N=28N=28 shell closure,* Université de Bordeaux

PROFESSIONAL CAREER:

1997: Postdoctoral Fellow, NSCL (National Superconducting Cyclotron Laboratory), MSU, USA
1998-2004: Research Scientist, LPC-Caen – Exotic Nuclei Group
2004-2010: Research Scientist, GANIL – LISE Group
2006-2010: Scientific Coordinator, LISE Spectrometer
2010-2014: Research Scientist, CENBG – Exotic Nuclei Group
2011-2018: Scientific Coordinator, PIPERADE Project
2014-2021: Senior Research Scientist (2nd Class), CENBG – Exotic Nuclei Group
Depuis 2021: Senior Research Scientist (1st Class), LP2i Bordeaux (formerly CENBG) – Exotic Nuclei Group

RESPONSIBILITIES:

2004-2010: Scientific Coordinator, LISE Spectrometer at GANIL
2011-2018: Scientific Coordinator, PIPERADE Project. Budget: ANR and others, €1.4M
1/2017-4/2018: Deputy Director, CENBG
2/2019-6/2020: Head of the Physics Division, GANIL
National Coordinator for IN2P3 Physics at GANIL
2020-2021: Member of the Steering Committee, National Prospects "Nuclear Physics & Astrophysics"
2023-2024: Scientific Lead, "Future of GANIL" Pre-Project
2021-2025: Elected Member, Section 01 of the National Committee – Scientific Secretary
Depuis 2023: Director, Joliot-Curie School

PhD SUPERVISION:

2021-2025: Q. Délignac, Study of proton and neutron contributions to the excitation of 2^+states in silicon isotopes between $N = 20$ and $N = 28$
2021-2025: M. Flayol, Development and characterization of the PIPERADE double Penning trap and mass measurements in the ^{78}Ni region
2019-2023: M. Hukkanen, Mass measurements with Penning traps and their impact on nuclear astrophysics
2014-2017: M. Aouadi, Development and integration of the PIPERADE line at CENBG
2011-2014: H. Guerin, Development of a double trapping system for spectroscopy studies at the DESIR/SPIRAL2 facility
2006-2009: C. Force, Study of the structure of ^{44}Svia its isomeric decay
2004-2007: B. Bastin, Study of the structure of neutron-rich nuclei around the $N = 28$shell closure via in-beam γ −spectroscopy

POSTDOC SUPERVISION:

2014-2016: P. Ascher, PIPERADE Project
2009-2011: L. Caceres, LISE Spectrometer and data analysis (in-beam γ −spectroscopy of ^{44}S)
2002: J. Mrazek, Dta analysis *(β-decay of $^{45\text{-}46}$Cl*)

TEACHING:

2011-2018: Lectures in M2 Nuclear Physics, Bordeaux – Experimental Aspects
2011-2018: Organization of courses for CENBG interns

AWARDS: CNRS Scientific Excellence Award (2010–2013)
Joliot-Curie Prize 2018, French Physical Society

COMMITTEES:

2021-2024: Member, International Committee for Experiments at the RIBF Accelerator (RIKEN, Japan)
Depuis 2021: Member, Scientific Council, IJCLab
Depuis 2012: Member, DESIR Collaboration Committee
2012-2020: Member, ALTO Accelerator Experiment Committee

REFEREE:

PRL, PRC, PLB, NIMA, NIMB and various grant applications (FWO, Île-de-France Region, Normandy Region, etc.)

RESEARCH ACTIVITIES AND SCIENTIFIC RESPONSIBILITIES:

My main research work, which supported my HDR defended in 2013, focused on the precise study of the N=28 shell closure. An original aspect of my work was to propose and conduct several experiments using complementary experimental techniques. The analysis and interpretation of the results, in collaboration with PhD students and postdocs I supervised, allowed us to characterize the evolution of the structure between ^{48}Ca, a doubly magic spherical nucleus, and ^{42}Si, a strongly deformed nucleus. In particular, we now have a good understanding of the mechanisms responsible for the development of deformation at N=28. I continue this research at LP2i-Bordeaux with an experimental campaign conducted in 2022 at GANIL, which simultaneously measured inelastic proton scattering and Coulomb excitation of silicon isotopes between N=20 and N=28 (Q. Délignac's thesis, 2022–25).
I have also worked on the N=20 shell closure (^{32}Mg, ^{34}Si, ^{34}Al) by proposing and conducting several experiments at GANIL and ISOLDE.
Since joining the Exotic Nuclei Group at LP2i Bordeaux (then CENBG) in 2010, I have continued my research on the structure of light neutron-rich nuclei and have been heavily involved in the DESIR project (experimental hall for ISOL beams), currently under construction as part of the SPIRAL2 facility at GANIL. From 2011 to 2018, I was the scientific coordinator of the PIPERADE project (Development of a Penning trap for the selection of radioactive ions at DESIR), which is now in the final commissioning phase at LP2i Bordeaux and will be transferred to DESIR by 2027. I have thus expanded my scientific program toward "low-energy ISOL physics" by investing in the study of nuclear structure using electromagnetic traps. This technique has developed strongly for the study of fundamental interactions but is still little used in studies of the structure of exotic nuclei. To this end, we have developed an experimental program for mass measurements in Jyväskylä (Finland), with recent results around exotic nuclei at N=60 (M. Hukkanen's thesis, 2019–23) and in the region of cobalt nuclei near N=40 (M. Flayol's thesis, 2022–25). I have also proposed several Letters of Intent for future experiments at S3/SPIRAL2 and DESIR/SPIRAL2.
In addition to participating in experiment committees and scientific councils, I took on several research management responsibilities in 2017, such as Deputy Director of CENBG and Head of the Physics Division at GANIL until July 2020. In 2019 and 2020, I was a member of the steering committee for the 2020 National Prospects in "Nuclear Physics and Astrophysics." Since 2023, I have been the Director of the European Joliot-Curie School. I was also an elected member of Section 01 for the 2021–2025 term, for which I served as Scientific Secretary.