

Preface

The present book contains the proceedings of the 6th International Workshop on Nuclear Fission and Spectroscopy of Neutron-Rich Nuclei (FISSION 2017), which took place in Chamrousse (France), on 20-24 March 2017 [1].

This meeting continues and merges two series of workshops that had been initiated by Institut Laue-Langevin (ILL). The workshop series on “Nuclear Fission and Fission-Product Spectroscopy” started in Seyssins in 1994 [2] and was repeated there in 1998 [3]. It was subsequently organized jointly by ILL, CEA and GANIL in Cadarache in 2005 [4] and 2009 [5] and in Caen in 2013 [6]. The present meeting was also the second workshop on “Spectroscopy of Neutron-Rich Nuclei” in Chamrousse, after a first workshop held there in 2008 [7]. The first Chamrousse workshop can be considered as the kick-off event that triggered the very successful EXILL campaign in 2012 and 2013 where the EXOGAM detectors were brought from GANIL to ILL. Complemented with GASP detectors from LNL Legnaro and clovers from LOHENGRIN, the EXILL campaign resulted in a wealth of new nuclear spectroscopy information as documented by several contributions to the present proceedings. The one-time EXILL campaign found its continuation with the installation of FIPPS, a new ILL instrument for spectroscopy of fission products and neutron-rich nuclei.

The present workshop brought together the community studying nuclear fission and its applications and the community performing spectroscopy of neutron-rich nuclei



respectively. 86 participants from 42 universities and institutes across the world attended the event.

The workshop was aimed at the presentation of recent experiments and results on fission and neutron-rich nuclei at existing facilities, using various types of fission experiments as well as beta-decay, isomer, in-beam and laser spectroscopy, lifetime, mass and magnetic moment measurements of neutron-rich nuclei. The experimental presentations were complemented by theory talks on fission and nuclear structure respectively.

Emphasis was also put on future studies that are possible at currently existing facilities and with new instruments and facilities such as FIPPS at ILL, NFS and S3 at SPIRAL2, ELI-NP, etc. which will open new perspectives over the next few years.

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