

Foreword

On September 24–26, 2019 a Scientific Workshop on Nuclear Fission Dynamics and the Emission of Prompt Neutrons and Gamma Rays (Theory-5) was held in Castelvecchio Pascoli, Barga, Italy. The workshop was organized by Unit G.2 Standards for Nuclear Safety, Security and Safeguards of the Joint Research Center (JRC), Geel, Belgium and the National Institute of Physics and Nuclear Engineering “Horia Hulubei”, Bucharest, Romania. It was the fifth workshop of a series initiated in 2010 (Sinaia, Romania) and continued in 2012 (Biarritz, France), 2014 (Opatija, Croatia) and 2017 (Varna, Bulgaria).

The organizers were assisted by a Programme Advisory Committee consisting of Roberto Capote: IAEA, Austria, Diane Dore: CEA Saclay, France, Jovana Nikolov: University of Novi Sad, Serbia, Andreas Oberstedt: ELI-NP, Romania, Karl-Heinz Schmidt: GEF, Erzhausen, Germany, and Patrick Talou: LANL, USA, Anabella Tudora: Bucharest University, Romania.

The purpose of the workshop was to provide a comprehensive overview of the dynamical aspects of nuclear fission and their consequences on fission fragment properties. The contributions have highlighted recent theoretical advancements and precise measurements performed at state-of-the-art facilities around the world. The success of the workshop was due to the 33 carefully prepared contributions and to the lively discussions they stimulated.

We would like to dedicate this volume to the memory of Dr. Mihai Mirea who passed away on August 27, 2020. He was an extremely valuable participant at all five Theory-X workshops. We will certainly miss him.

A very special ‘thank you’ goes to the perfect local organizational support of Mira Van de Lucht.

Stephan Oberstedt and Nicolae Carjan

October 2021