



ECOLE
POLYTECHNIQUE
DE BRUXELLES

Probabilistic Dynamic Security Assessment of Power Systems

Thesis submitted by Frédéric SABOT

in fulfilment of the requirements of the PhD Degree in Engineering Sciences
("Doctorat en Science de l'Ingénieur")

Academic year 2024-2025

Supervisor: Professor Pierre HENNEAUX

Co-supervisor: Professor Pierre-Etienne LABEAU

BEAMS – Electrical Energy

Thesis jury:

Michel KINNAERT (Université libre de Bruxelles, Chair)

Johan GYSELINCK (Université libre de Bruxelles, Secretary)

Jonathan SPROOTEN (Elia)

Louis WEHENKEL (Université de Liège)

Panagiotis N. PAPADOPOULOS (University of Manchester)

Mathaios PANTELI (University of Cyprus)