



KU LEUVEN

Laboratory for Computational and Evolutionary Virology  
Department of Microbiology and Immunology  
Rega Institute for Medical Research  
Faculty of Medicine  
Group of Biomedical Sciences

Doctoral Thesis in Biomedical Sciences

**CONTINUOUS-TIME MARKOV CHAIN MODELS  
FOR PATHOGEN PHYLODYNAMICS:  
MODEL EXTENSION, SIMULATION AND VISUALISATION**

FILIP BIELEJEC

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KU Leuven – University of Leuven  
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