

VU Research Portal

Rich dynamics in multi-strain models: Non-linear dynamics and deterministic chaos in dengue fever epidemiology

Aguiar Freire dos Santos, M.

2012

document version

Publisher's PDF, also known as Version of record

[Link to publication in VU Research Portal](#)

citation for published version (APA)

Aguiar Freire dos Santos, M. (2012). *Rich dynamics in multi-strain models: Non-linear dynamics and deterministic chaos in dengue fever epidemiology*.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal ?

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

E-mail address:
vuresearchportal.ub@vu.nl

VRIJE UNIVERSITEIT

RICH DYNAMICS IN MULTI-STRAIN MODELS:
NON-LINEAR DYNAMICS AND DETERMINISTIC
CHAOS IN DENGUE FEVER EPIDEMIOLOGY

ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad Doctor aan
de Vrije Universiteit Amsterdam,
op gezag van de rector magnificus
prof.dr. L.M. Bouter,
in het openbaar te verdedigen
ten overstaan van de promotiecommissie
van de faculteit der Aard- en Levenswetenschappen
op maandag 23 april 2012 om 15.45 uur
in de aula van de universiteit,
De Boelelaan 1105

door

Maíra Aguiar Freire dos Santos

geboren te Belo Horizonte, Minas Gerais, Brazilië

promotoren: prof.dr. S.A.L.M. Kooijman
 prof.dr. F. Dionisio
copromotor: dr.ir. B.W. Kooi

Dit proefschrift werd mede-begeleid door prof.dr. N. Stollenwerk