



ABCDE



## Scientific Report

First name / Family name

Matteo Mio

Nationality

Italian

Name of the *Host Organisation*

CWI-Amsterdam

First Name / family name  
of the *Scientific Coordinator*

Prof. Jan Rutten

Period of the fellowship

01/03/2013 to 28/02/2014

## **I – SCIENTIFIC ACTIVITY DURING YOUR FELLOWSHIP**

During this year I continued the line of research initiated, during my first ERCIM-fellowship year, in France (Ecole Polytechnique). I developed a theory of behavioural equivalences for probabilistic nondeterministic systems, using ideas from functional analysis, and established potentially useful connections with quantitative logics.

## **II – PUBLICATION(S) DURING YOUR FELLOWSHIP**

M. Mio, A. Simpson. *Lukasiewicz  $\mu$ -Calculus*, In Proceedings of International Workshop of Fixed Points in Computer Science (FICS), EPTCS 126, pages 87–104, 2013.

Mio. *Upper-Expectation Bisimilarity and Lukasiewicz  $\mu$ -Calculus*, to appear in Proceedings of 17<sup>th</sup> International Conference on Foundations of Software Science and Computation Structures (FoSSaCS), 2014

## **III – ATTENDED SEMINARS, WORKHOPS, CONFERENCES**

AGC Seminars at CWI-Amsterdam.

COIN Seminars in the Netherlands.

Invited speaker at: IST-Vienna, University of Warsaw, University of Lyon, University of Paris Diderot, Aachen University, CSL Conference 2013.

## **IV – RESEARCH EXCHANGE PROGRAMME (REP)**

I visited the Automata Theory Group of the University of Warsaw two times (October 2013 and February 2014) for collaborations.