

# GPGPU-enabled parallel sampling of large scale metabolic models

Marouen Ben Guebila<sup>1</sup> and Ines Thiele<sup>1\*</sup>

*Abstract—*

## I. INTRODUCTION

## II. MATERIAL AND METHODS

## III. RESULTS

Model	Points	Steps	Intel Xeon (3.5 Ghz)	Quadro K600 (0.87 Ghz)	Tesla M2090	K40m
Ecoli core	1000	1000	42	1.9	1.2	2307
Ecoli core	5000	1000	208	8.3	1.88	
Ecoli core	10000	1000	420	17.8	3.33	
P Putida	1000	1000	103	54	32	
P Putida	5000	1000	516	223	59	
P Putida	10000	1000	1081	440	111	
Recon2	1000	1000				
Recon2	5000	1000				
Recon2	10000	1000				

## ACKNOWLEDGMENT

The experiments presented in this paper were carried out using the HPC facilities of the University of Luxembourg [?]

– see <http://hpc.uni.lu>.

<sup>1</sup>Molecular Systems Physiology group at the Luxembourg Centre for Systems Biomedicine, University of Luxembourg, Campus Belval.

\*corresponding author: [ines.thiele@uni.lu](mailto:ines.thiele@uni.lu)