

# **Branching stochastic processes as models of Covid-19 epidemic development**

**Date\_Sun - week 53**

**N. Yanev, V. Stoimenova, D. Atanasov**

---

## **Branching stochastic processes as models of Covid-19 epidemic development : Date\_Sun - week 53**

### **Abstract**

The results presented here are obtained using the methodology proposed in the paper <https://arxiv.org/abs/2004.14838> for the country Date\_Sun. The data comes from European Centre for Disease Prevention and Control available at <https://opendata.ecdc.europa.eu/covid19/casedistribution/csv>.

---

## Table of Contents

1. Observed Infection data .....	1
2. Estimating of the main parameter and some predictions .....	3

---

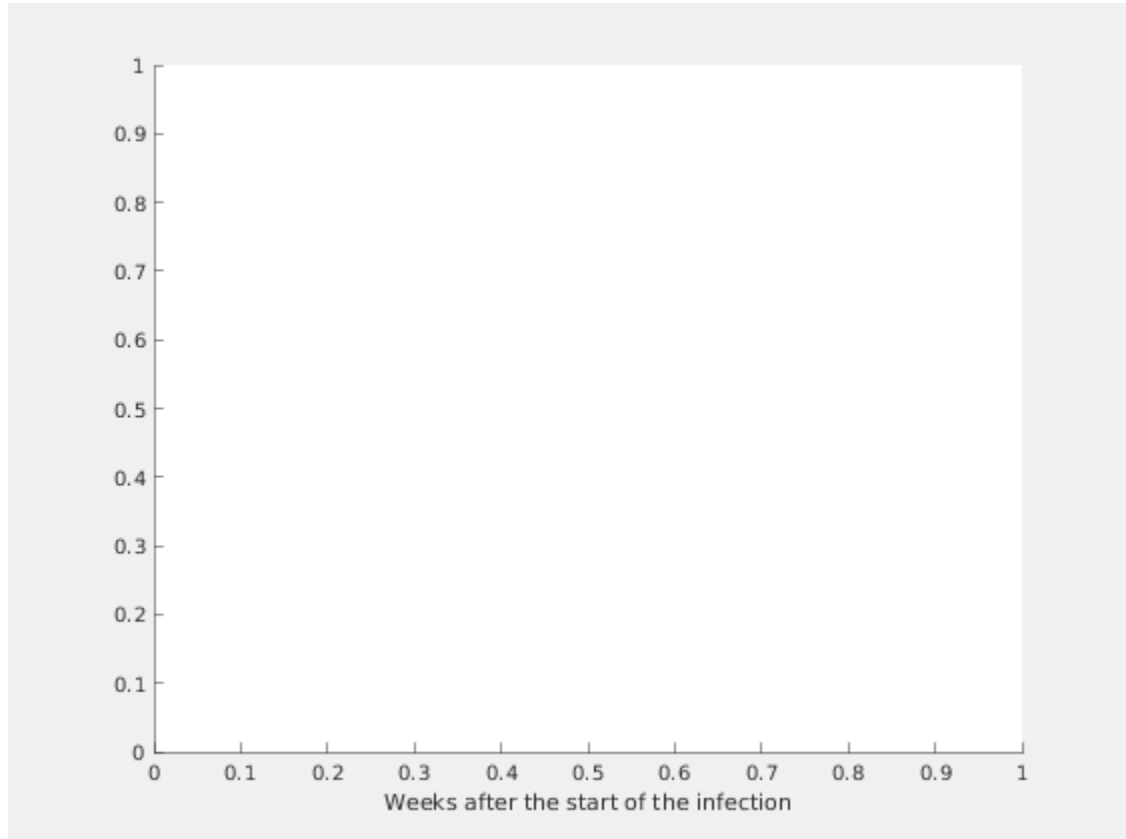
## List of Figures

1.1. Number of the weekly reported laboratory-confirmed cases .....	1
1.2. Number of the total registered cases .....	2
2.1. Expected number of the nonregistered infected individuals with immigration .....	3

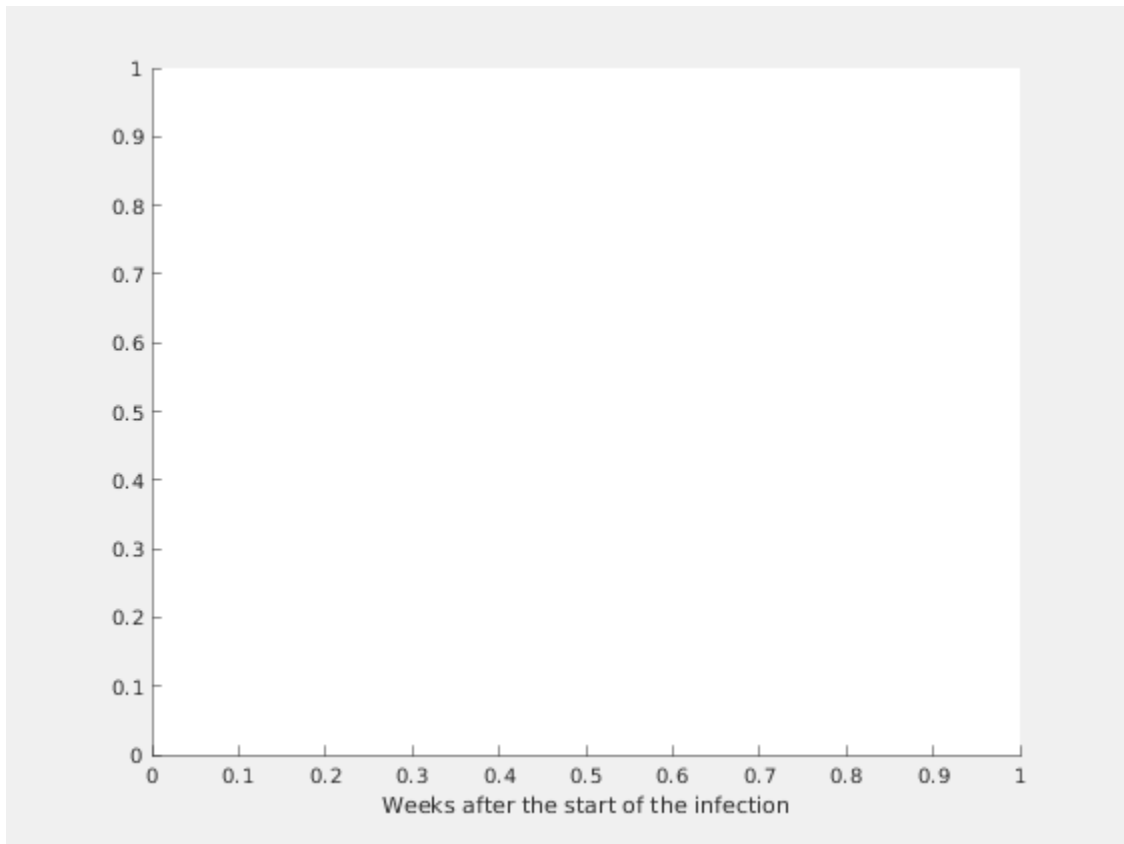
---

# Chapter 1. Observed Infection data

Figure 1.1. Number of the weekly reported laboratory-confirmed cases

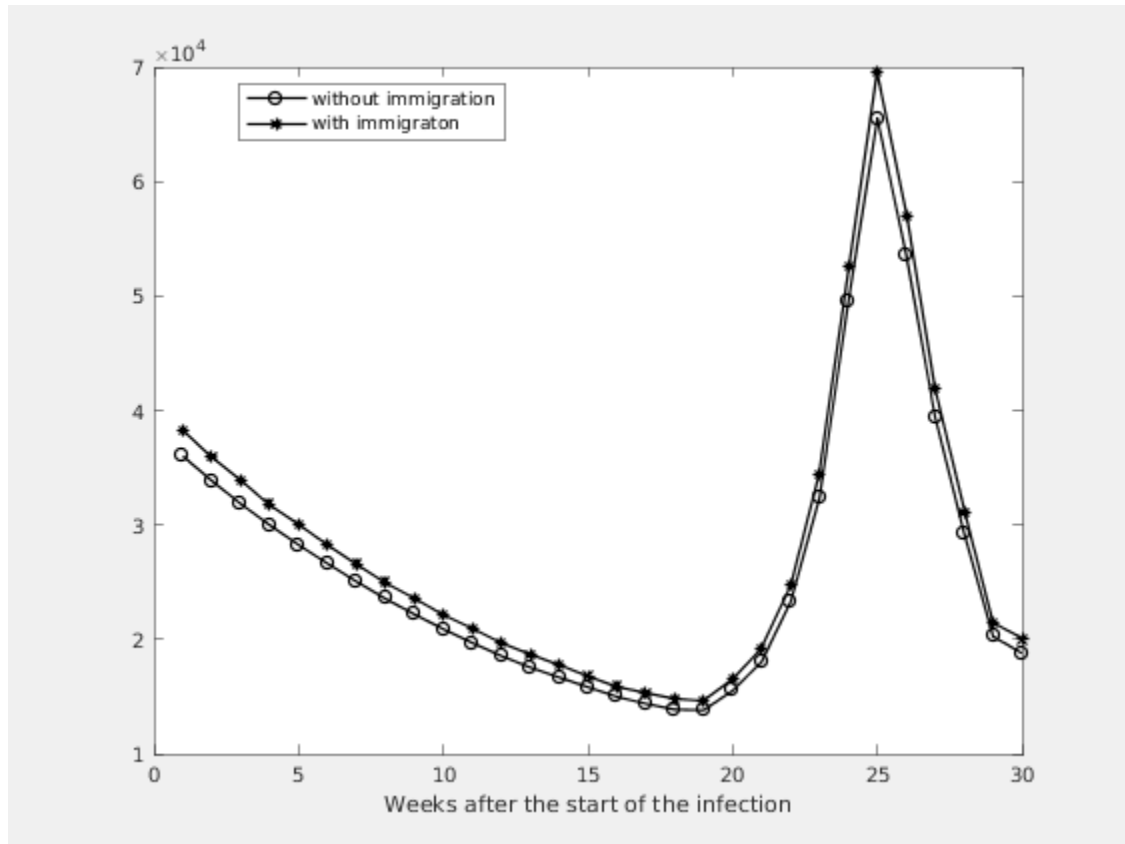


**Figure 1.2. Number of the total registered cases**



# Chapter 2. Estimating of the main parameter and some predictions

Figure 2.1. Expected number of the nonregistered infected individuals with immigration



Estimation of the model parameters.

k	m	ci	alpha	A1	M1
4	0.0000	0.0000 - 0.0000	0.0000	0	0