

## **Abstract**

The development of optimal vaccination strategies leads to interesting mathematical problems. This talk will give an overview of a forthcoming book chapter that presents several such open problems in a form suitable for undergraduate research projects. In these problems it is assumed that the contact network can be represented by a small-world network. Through a sequence of background information and preliminary exercises, we take the readers to the point where they can engage in bona fide research on these questions.

# Vaccination strategies for small worlds\*

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September 1, 2016

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