

On using the information index in socio-epidemiological models

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The information index is a distributed delay which mimics the behavioral changes of individuals during an epidemics [5,6]. It is an extension of the idea of prevalence-dependent contact rate, developed by V. Capasso in the seventies, which describes the behavioral response of individuals to prevalence [3]. A paradigmatic application of the information index is to model parents' hesitancy toward vaccine for childhood diseases [4]. However, this approach may be used also to represent the effects of human decisions on the spread of diseases when vaccination is not available [5,6]. In this talk, we first introduce the information index. Then, we mention the main theoretical and practical aspects of behavioral models [1,2]. Finally, we discuss some possible future perspectives.

References

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