

Prediction of information diffusion through epidemiological models

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Information diffusion on social media is a quite complex phenomenon to be analyzed, since these are free and easily accessible to anyone who has an Internet connection and a proper device. There are several mathematical approaches to carry out this kind of analysis: one of these consists of using epidemiological models based on ordinary differential equations [2, 3, 4]. However, describing only the evolution of the phenomenon is not sufficient, but it is even required to predict its evolution.

The main aim of this talk is to highlight how, using a proper parameter estimation strategy and an adequate dataset, built using real data, it is possible to obtain the desired predictions [1], as showed by numerical tests realized studying real news spread on the social network X (Twitter) during the period 2020-2022.

References

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