DYNAMICS OF INFLUENZA WITH THE RATES OF VACCINATION AND TREATMENT

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Influenza is one of the most common diseases worldwide. In this work, we investigate the dynamics of influenza effected by vaccination and treatment with an SIR model that includes Caputo type fractional derivative. These dynamics are explained with this model by using Fractional Backward Euler Method [1].

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## References

<sup>[1]</sup> P. Tomášek, On Euler methods for Caputo fractional differential equations. Archivum Mathematicum, 59 : 287–294, 2023.