

## ABSTRAK

Coronavirus Disease 2019 (Covid-19) terkonfirmasi masuk ke Indonesia pada bulan Maret 2020. Penyebaran virus ini terjadi dengan sangat cepat. Setiap hari jumlah pasien yang terdampak virus ini terus bertambah dan menyebar di seluruh Provinsi di Indonesia, salah satunya di Provinsi Sumatera Barat, sehingga perlu diadakan penelitian untuk menduga peningkatan kasus dari hari ke hari. Dalam skripsi ini akan dimodelkan peningkatan kasus pasien positif covid-19 menggunakan metode interpolasi polinomial lagrange dan metode smoothing polinomial. Dari hasil penelitian diperoleh bahwa metode interpolasi polinomial lagrange lebih baik dalam menduga dari pada metode smoothing polinomial, walaupun kedua metode ini dapat digunakan untuk menduga data peningkatan pasien positif covid-19 di Sumatera Barat dengan baik.

**Kata Kunci :** Covid-19, Interpolasi Lagrange, Smoothing Polinomial.



## ***ABSTRACT***

Coronavirus Disease 2019 (Covid-19) was confirmed to enter Indonesia in March 2020. The spread of this virus has occurred very quickly. Every day the number of patients affected by this virus continues to increase and spread throughout the provinces in Indonesia, one of which is in the Province of West Sumatra. So it is necessary to conduct research to predict the increase in cases from day to day. In this thesis, we will model the increase in cases of positive Covid-19 patients using the Polynomial Lagrange interpolation method and smoothing polynomial method. From the results of the study, it was found that the polynomial lagrange interpolation method was better at predicting than the smoothing polynomial method, although these two methods can be used to predict the data on the increase in positive Covid-19 patients in West Sumatra properly.

***Keywords :*** *Covid-19, Lagrange Interpolation, Smoothing Polynomial*

