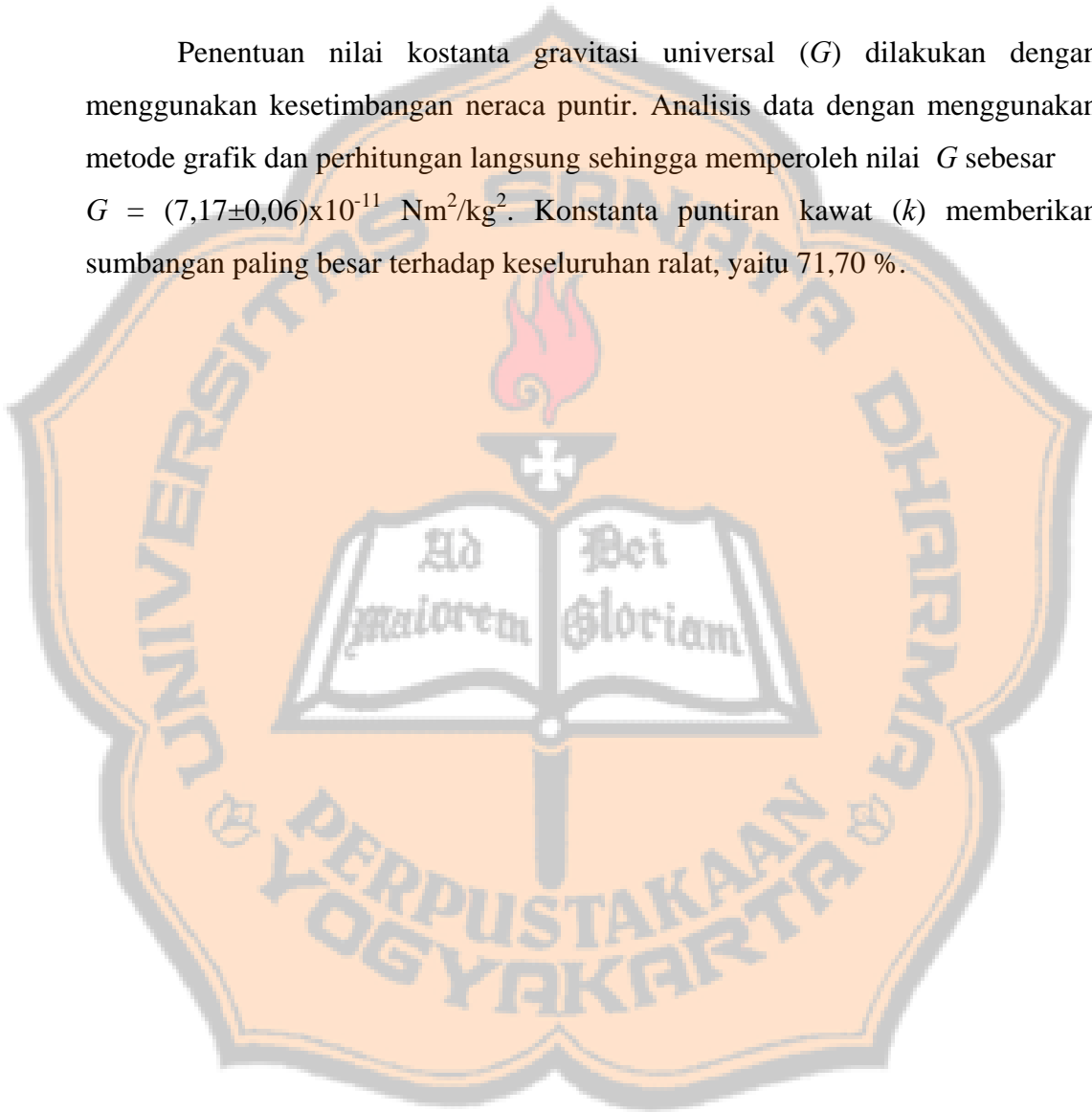


# PENENTUAN NILAI KONSTANTA GRAVITASI UNIVERSAL ( $G$ ) DENGAN MENGGUNAKAN KESETIMBANGAN NERACA PUNTIR

## ABSTRAK

Penentuan nilai konstanta gravitasi universal ( $G$ ) dilakukan dengan menggunakan kesetimbangan neraca puntir. Analisis data dengan menggunakan metode grafik dan perhitungan langsung sehingga memperoleh nilai  $G$  sebesar  $G = (7,17 \pm 0,06) \times 10^{-11} \text{ Nm}^2/\text{kg}^2$ . Konstanta puntiran kawat ( $k$ ) memberikan sumbangan paling besar terhadap keseluruhan ralat, yaitu 71,70 %.



DETERMINATION OF  
THE UNIVERSAL GRAVITATIONAL CONSTANT ( $G$ ) VALUE  
BY USING TORSION BALANCE

ABSTRACT

Determination of the universal gravitational constant ( $G$ ) value has been performed by using torsion balance. Analyzing the data by using the graphical method and direct calculations, we obtained the value of the  $G$  is  $G = (7,17 \pm 0,06) \times 10^{-11} \text{ Nm}^2/\text{kg}^2$ . Wire torsion constant ( $k$ ) gives the largest contribution to the total error, that is 71,70 %.

