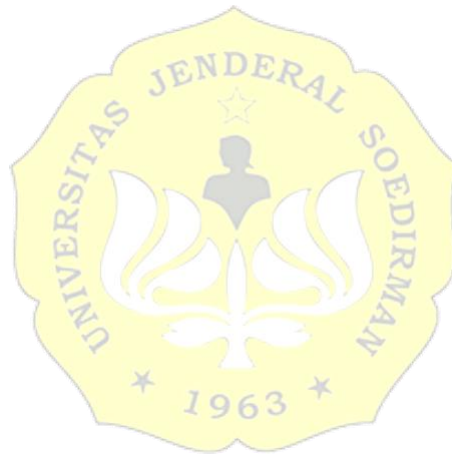


ABSTRAK

Skripsi ini membahas mengenai hasil kali geometri antara vektor dan bivektor. Hasil kali geometri antara vektor dan bivektor merupakan penjumlahan dari hasil kali dalam dan hasil kali luar antara vektor dan bivektor. Hasil kali dalam antara vektor dan bivektor bersifat anti-komutatif, sedangkan hasil kali luar antara vektor dan bivektor bersifat komutatif. Hasil kali dalam vektor \mathbf{a} dan bivektor \mathbf{B} dapat dituliskan sebagai setengah dari hasil pengurangan hasil kali geometri vektor \mathbf{a} dan bivektor \mathbf{B} oleh hasil kali geometri bivektor \mathbf{B} dan vektor \mathbf{a} . Sementara itu, hasil kali luar vektor \mathbf{a} dan bivektor \mathbf{B} dapat dituliskan sebagai setengah dari hasil penjumlahan hasil kali geometri vektor \mathbf{a} dan bivektor \mathbf{B} dan hasil kali geometri bivektor \mathbf{B} dan vektor \mathbf{a} .

Kata kunci: anti-komutatif, bivektor, hasil kali dalam, hasil kali geometri, hasil kali luar, vektor.



ABSTRACT

This research discusses geometric product between vector and bivector. This product is the sum of the inner product and the outer product between vector and bivector. The inner product between the vector and the bivector are anti-commutative, while the outer product between vector and bivector are commutative. The inner product of vector \mathbf{a} and bivector \mathbf{B} can be written as half of result of subtracting the geometric product of vector \mathbf{a} and bivector \mathbf{B} by the geometric product of bivector \mathbf{B} and vector \mathbf{a} . Meanwhile, the outer product of vector \mathbf{a} and bivector \mathbf{B} can be written as half of the summation of the geometric product of vector \mathbf{a} and bivector \mathbf{B} and the geometric product of bivector \mathbf{B} and vector \mathbf{a} .

Keywords: *anti-commutative, bivector, inner product, geometric product, outer product, vector.*

