

BAB 7

KESIMPULAN

Berdasarkan uraian dalam tugas akhir ini, penulis telah menggunakan formalisme Newman-Penrose untuk memperlihatkan separabilitas pada persamaan medan skalar bermuatan dalam geometri Kerr-Newman. Hasil di persamaan (5.27), dan (5.26) cocok dengan yang ada di dalam literatur [28]. Formalisme Newman-Penrose terasa efektif saat membahas medan skalar nirmassa dan bermuatan dalam geometri Kerr-Newman terakselerasi, dimana penulis berhasil mendapatkan persamaan gerak untuk medan tersebut. Seharusnya persamaan (6.13) dapat dipisahkan, sebagaimana dalam kasus Kerr terakselerasi [27, 29]. Namun, tingkat kerumitan persamaan (6.13) yang cukup tinggi membutuhkan waktu pengerjaan yang lebih panjang dari waktu normal pengerjaan tugas akhir tingkat sarjana.

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