ON THE DESCRIPTION OF HIGH-FREQUENCY
GRAVITATIONAL WAVES

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Abstract. Taub and I have used the 'Average Lagrangian' method (Whitham, 1971; Dougherty, 1970) for the case of gravitational waves (MacCallum and Taub, 1973; Taub, 1973). A difficulty arises in going beyond first-order effects as gauge waves and physical waves appear to interact (MacCallum, 1973). The source of this difficulty is not yet known, but doubt is cast on the usual conceptual framework.

References

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