

Abstract Submitted  
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**Multicomponent WKB and Path Integrals** A. S. RICHARDSON,  
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Berkeley and LBNL — By examining path integral methods for multicomponent  
wave equations in the presence of localized resonances, we are led to a new approach  
to multicomponent WKB. We are pursuing a new formalism, developed by N. Zobin,  
which should make it easier to identify uncoupled dispersion functions and polariza-  
tions, even in complicated geometry. As an example, a toroidally symmetric plasma  
is studied using a cold plasma model similar to that used in [1].

1] A. N. Kaufman, E. R. Tracy, and A. J. Brizard, “Helical rays in two- dimensional resonant wave conversion”, Phys. Plasma 12 (2005) 022101.

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