Software Spec: PathCalculator Class

Direct amplitude:

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In matrix multiplication format, and for a single path and L:

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! Need to answer the question – for L = (l, m), do the n-values contribute or are they all the same for each m, meaning that the overall sum gains a factor of (2l + 1) and reduces to l-sum?

The definitions of the matrices are:

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NOTE – need to modify the exponential in Q to account for the inner potential decay.

HMM – SEE RA 1990 eq 23 and thereafter – an explanation for the factor of (-1)^m?

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Where the index n is the RA Order (typically 1, 3, or 6), and m is all (l,m) values, dimension:

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So for Lmax = 10, m = 120.

In explicit terms of R,

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